

Sent by CDOW  
scoping No. G-002-R3  
Reference Material

2002

**Southwestern Willow Flycatcher Surveys in the San Luis Valley, CO.**

**Submitted to**

**Kelli Stone  
Wildlife Biologist  
Alamosa National Wildlife Refuge  
9383 El Rancho Lane  
Alamosa, CO 81101**

**Submitted by**

**Hawks Aloft, Inc.  
P.O. Box 10028  
Albuquerque, NM 87184  
(505) 828-9455  
[www.hawksaloft.org](http://www.hawksaloft.org)  
email: [lalterman@hawksaloft.org](mailto:lalterman@hawksaloft.org)**

**26 November 2002**

## TABLE OF CONTENTS

|                         |    |
|-------------------------|----|
| Executive Summary ..... | 1  |
| Introduction .....      | 2  |
| Study Area .....        | 2  |
| Methods.....            | 6  |
| Results .....           | 7  |
| Discussion .....        | 9  |
| Recommendations.....    | 11 |
| Acknowledgments .....   | 12 |
| Literature Cited.....   | 13 |

### Appendices

|   |     |
|---|-----|
| A. Maps and photographs of the Alamosa National Wildlife Refuge survey areas. ....                                  | 14  |
| B. Maps and photographs of the Rio Grande National Forest survey areas. ....  | 16  |
| C. Maps and photographs of the Colorado Division of Wildlife survey areas. ....                                     | 35  |
| D. Data forms from the 2002 Southwestern Willow Flycatcher surveys. ....  | 46  |
| E. UTM coordinates for Southwestern Willow Flycatchers detected at Alamosa National Wildlife Refuge.....            | 102 |
| F. Maps of Southwestern Willow Flycatcher detection sites at Alamosa National Wildlife Refuge .....                 | 104 |
| G. UTM coordinates for Southwestern Willow Flycatchers detected at Colorado Division of Wildlife survey areas. .... | 109 |
| H. Maps of Southwestern Willow Flycatcher detection sites at Colorado Division of Wildlife survey areas.....        | 112 |
| I. Photographs of Southwestern Willow Flycatcher detection sites. ....  | 126 |
| J. List of species observed at survey areas in the San Luis Valley.....   | 129 |

## LIST OF TABLES

1. Number of Southwestern Willow Flycatchers detected during surveys at Alamosa National Wildlife Refuge (ANWR), the Rio Grande National Forest (RGNF), and Colorado Division of Wildlife (CDOW) State Wildlife Areas, 2002..... 8

## EXECUTIVE SUMMARY

We conducted surveys for the federally endangered Southwestern Willow Flycatcher (*Empidonax traillii extimus*) in the San Luis Valley during the 2002 breeding season. The survey areas were located along riparian corridors on Alamosa National Wildlife Refuge, the Rio Grande National Forest, and Colorado Division of Wildlife State Wildlife Areas. The highest concentration of Willow Flycatchers was found on the Rio Grande State Wildlife Area, with 11, 22, and 26 birds detected during the first, second, and third survey periods, respectively. The next highest number of flycatchers was found on Alamosa National Wildlife Refuge, with 3, 19, and 23 birds detected during the respective survey periods. We also found flycatchers at Hot Creek, Higel, and Sego Springs State Wildlife Areas. At Hot Creek, we detected 2, 6, and 2 flycatchers during the first, second, and third surveys, respectively. At Higel, we found 2 flycatchers in the second period, and 1 in the third period. Finally, we detected 2 flycatchers at Sego Springs during the first survey period. We did not detect any Southwestern Willow Flycatchers at two other State Wildlife Areas that were surveyed, LaJara and Poso Creek. In addition, we did not find flycatchers at any of the Rio Grande National Forest surveys areas. Many of these sites contained little or no suitable habitat for Southwestern Willow Flycatchers. Our data will assist wildlife managers in the San Luis Valley implementing the recovery plan for the Southwestern Willow Flycatcher, and may be used to identify specific riparian areas for habitat restoration.



## INTRODUCTION

The Southwestern Willow Flycatcher (*Empidonax traillii extimus*) is currently listed as endangered under the Federal Endangered Species Act (USFWS 1995), and is considered a riparian obligate in the southwestern U.S. (BLM 1998, NMPIF 2000). During the breeding season, this neotropical migratory species occupies dense, shrubby habitat, usually in close proximity to water or saturated soil (Sogge et al. 1997, Sedgwick 2000). Human disturbances to natural waterways, including damming, channelization, and dredging, have impacted flycatcher habitat, resulting in some of this species' recent decline (Sedgwick 2000). Currently, the known breeding population of the Southwestern Willow Flycatcher is estimated at 300-500 pairs (Sogge et al. 1997).

The U.S. Fish and Wildlife Service has identified four general breeding habitat types for the Southwestern Willow Flycatcher: monotypic high-elevation willow (*Salix* sp.); monotypic exotic (e.g. saltcedar [*Tamarix* sp.] and Russian olive [*Elaeagnus angustifolia*]); native broadleaf (e.g., willow, cottonwood [*Populus* sp.], and ash [*Fraxinus* sp.]); and mixed native/exotic (Sogge et al. 1997). The San Luis Valley in southern Colorado provides a number of riparian corridors with suitable habitat for Southwestern Willow Flycatchers. Wildlife Biologists from the U.S. Fish and Wildlife Service, the U.S. Forest Service, and the Colorado Division of Wildlife have identified specific areas in the San Luis Valley that are classified as potential flycatcher habitat. In 2002, Hawks Aloft, Inc. surveyed 27 of these riparian sites for Southwestern Willow Flycatchers.

## STUDY AREA

This study was conducted on Alamosa National Wildlife Refuge (ANWR), the Rio Grande National Forest (RGNF), and Colorado Division of Wildlife (CDOW) State Wildlife Areas. Two survey areas were delineated at ANWR, 20 in the RGNF, and 6 in CDOW State Wildlife Areas.

### Alamosa National Wildlife Refuge

**Alamosa North Survey Route.** -- The ANWR North Survey Route began at the refuge headquarters and continued north along the Rio Grande for 1.6 km (Appendix A). Dominant vegetation along the river consisted of coyote willow (*Salix exigua*) and cottonwood (*Populus* sp.) species, with the mean canopy height of approximately 2.5 m. Although this area contained several patches of potential habitat, more than half of the vegetation was probably too narrow for Southwestern Willow Flycatchers. In addition, some of habitat appeared to be disturbed by livestock. Flowing water was present in this section of the Rio Grande during all of our surveys.

**Alamosa South Survey Route.** -- The ANWR South Survey Route also began at refuge headquarters and continued south approximately 14.5 km along the Rio Grande (Appendix A). This area was dominated by coyote willow, narrow-leaf cottonwood (*Populus angustifolia*), and elm species (*Ulmus* sp.), with a mean canopy height of approximately 3 m. The first 3 km of the survey route contained almost continuous willow, interspersed with cottonwoods, while the next

6.5 km contained mostly thin strips of vegetation, or no vegetation at all. Riparian habitat improved throughout the last several kilometers of the survey route. Water was flowing through this portion of ANWR during all of our surveys.

### **Rio Grande National Forest**

***Bighorn Creek, Reach 2.*** -- This survey site included a 0.4 km section of Bighorn Creek (Appendix B). The upstream end of this reach is a fork, where Reaches 3 and 4 of Bighorn Creek meet and flow into Reach 2. Although the mean height of riparian vegetation was approximately 4 m, Reach 2 did not appear to be suitable for Southwestern Willow Flycatchers. Dominant vegetation consisted mostly of junipers (*Juniperus* sp.), rabbitbrush (*Ericameria* sp.), and currant species (*Ribes* sp.), with only a few scattered, young willows. No water was present at Bighorn Creek during any of our surveys.

***Bighorn Creek, Reach 3.*** -- Reach 3 of Bighorn Creek was upstream and directly adjacent to reach 2, and included 0.3 km dominated by coyote willow and rabbitbrush (Appendix B). Several mature narrowleaf cottonwoods also lined the creek bed. These cottonwoods were too tall (approximately 12 m) and sparse to be considered appropriate habitat for Southwestern Willow Flycatchers. In addition, although the willows averaged about 2.5 m in height, they were also sparse, and therefore, not suitable flycatchers. There was no flowing or standing water at this site during any of our surveys.

***Bighorn Creek, Reach 4.*** -- Reach 4 of Bighorn Creek was also upstream and directly adjacent to Reach 2 (Appendix B). This site was 0.3 km in length, and was also dominated by very sparse coyote willows and young narrowleaf cottonwoods, with a mean height of 3 m. This survey area was also not considered suitable for Southwestern Willow Flycatchers. As with the other reaches of Bighorn Creek, this reach did not contain any water during our surveys.

***Canyon Creek, Reach 2.*** -- This survey site included a 0.5 km section of Canyon Creek (Appendix B), dominated by coyote willow, rabbitbrush, and sage (*Artemesia* sp.). Although the mean height of the vegetation was about 3 m, the willow in this area were very young and sparse, and did not appear to be suitable flycatcher habitat. No water was present at Canyon Creek during any of the survey periods.

***Tributary to Canyon Creek, Reach 1.*** -- This 0.4 km section of riparian habitat was very similar to the adjacent Canyon Creek (Appendix B). Dominant vegetation included scattered coyote willow, rabbitbrush, and sage, with a mean height of about 2 m. Vegetation at this site was also too thin for Southwestern Willow Flycatchers, and water was absent at this site during our surveys.

***Cat Creek, Reach 2.*** -- This survey area encompassed 1.1 km of Cat Creek, but included only a thin strip of marginal Willow Flycatcher habitat consisting of 2.5 m tall coyote willow (Appendix B). Other dominant vegetation included rabbitbrush and Ponderosa pine (*Pinus ponderosa*). There was only a trickle of water in Cat Creek during the flycatcher surveys; however a few standing pools were also present. Water level in these pools decreased as the survey periods progressed.

**Cat Creek, Reach 4.** -- This section of Cat Creek was about half the length (0.5 km) of Reach 2, and contained very little habitat suitable for flycatchers (Appendix B). There were a few small stands of coyote willow with a mean height of 4 m, however, most of the area was dominated by junipers and a few other deciduous trees averaging approximately 12 m in height. There was no flowing water in Reach 4 of Cat Creek; however, there were a few standing pools in the area.

**Deer Creek, Reach 2.** -- This was a small survey area (0.5 km) adjacent to Reach 4 of Cat Creek, that contained very little potential flycatcher habitat (Appendix B). This site contained a few small patches of coyote willow averaging 3 m in height, but was dominated by pinyon pine (*Pinus edulis*), juniper species, and a few tall (mean of 12 m) deciduous trees. No water was present at Deer Creek during any of our surveys.

**Conejos River, Reach 2 / Trail Gulch.** -- This survey area included 1.7 km along the Conejos River, including Trail Gulch, a small section of riparian vegetation perpendicular to the river (Appendix B). Most of the habitat suitable for Southwestern Willow Flycatchers occurred towards the downstream end of the reach, where several dense strips of narrowleaf cottonwood and coyote willow were present on both sides of the river. There were other patches of willows along the river; however, these were considered too thin (< 10 m in width) to be suitable habitat. Ponderosa pine and mountain alder (*Alnus incana*) were also relatively abundant along Reach 2 of the Conejos River. The mean height of vegetation was approximately 6 m. Water level was relatively high during the first survey period, but decreased noticeably throughout the second and third survey periods.

**Conejos River, Reach 4.** -- This 1.5 km section of the Conejos River (Appendix B) was also dominated by relatively tall (6 m), dense patches of narrowleaf cottonwood and coyote willow, as well as Ponderosa pine. While most of these patches occurred along the river, there was one patch of marsh habitat, which appeared to be suitable for flycatchers, behind River Springs Ranger Station. The marsh eventually dried out towards the latter portion of the survey periods, as the water flow in the Conejos River similarly decreased.

**Hot Creek, Reach 3.** -- This 0.5 km stretch of Hot Creek (Appendix B) did not appear to be suitable for Southwestern Willow Flycatchers. Mountain alder was the dominant tree species, followed by quaking aspen (*Populus tremuloides*), and fir species (*Abies* sp.). Although the mean height of the vegetation was approximately 7m, alder and aspen are not typical flycatcher habitat. There was no flowing water at this site; however, there were a few beaver ponds in the area.

**Hot Creek, Reach 4.** -- Reach 4 of Hot Creek included 0.7 km of riparian habitat (Appendix B) that was not considered suitable for Southwestern Willow Flycatchers. Aspen and mountain alder were the dominant tree species, with a mean height of about 7 m. Water was flowing through this section of Hot Creek during our surveys, and several beaver ponds were also present.

**Tributary to Hot Creek, Reach 1.** -- This area included a very small portion (0.3 km) of the spur stream flowing off of Hot Creek (Appendix B). This site did not contain significant willow

or cottonwood habitat, and was not suitable for flycatchers. Dominant vegetation included juniper species and aspen, with a mean height of approximately 6 m. Water was not present at this site during our surveys.

***Tributary to Hot Creek, Reach 2.*** -- This 0.3 km of Hot Creek's tributary was directly adjacent to Reach 1 (Appendix B). Dominant vegetation here included aspen and juniper species, with a mean height of 7 m. No water was present, and this area was also not considered suitable habitat for Southwestern Willow Flycatchers.

***Tributary to Hot Creek, Reach 3.*** -- Reach 3 of Hot Creek's tributary included 0.3 km of riparian habitat directly adjacent to Reach 2 (Appendix B). Like the rest of the tributary, this area contained no water, was dominated by aspen and juniper, and was not considered suitable habitat for Southwestern Willow Flycatchers. The mean height of vegetation here was approximately 8 m.

***Ojito Creek, Reach 1.*** -- This survey site included 1.0 km of Ojito Creek, with only a one small stand of potential flycatcher habitat consisting of coyote willow (Appendix B). The dominant plant species were aspen and juniper, and mean height of the vegetation was about 10 m. There was no water in this section of Ojito Creek during any of our surveys.

***Rito Hondo, Reach 1.*** -- This section of Rito Hondo included 0.3 km of habitat considered unsuitable for Southwestern Willow Flycatchers (Appendix B). The area consisted mostly of junipers, averaging about 4 m in height, with only a few scattered narrowleaf cottonwoods. The creek bed was lined with grasses, and did not contain any water during any of our surveys.

***Rito Hondo, Reach 2.*** -- Reach 2 of Rito Hondo was adjacent to and upstream from Reach 1, and included 1.7 km of habitat (Appendix B). The lower portion of the reach contained primarily junipers, and did not appear to be suitable for flycatchers. The upper portion, however, also contained a number of potential patches of habitat, consisting of coyote willow and narrowleaf cottonwood, with a mean height of about 5 m. Some water was present during our surveys, but the area was completely dry by the third survey period.

### **Colorado Division of Wildlife**

***Higel State Wildlife Area.*** -- This survey area included approximately 2.8 km along the Rio Grande, within Higuel State Wildlife Area (Appendix C). Suitable habitat for Southwestern Willow Flycatchers occurred in the western portion of this area, and contained willow and cottonwood species, with a mean height of about 3 m. Water was present on the ground in the western portion of the survey area, but water levels decreased from the first to the third survey period.

***Hot Creek State Wildlife Area.*** -- This approximately 7.4 km section of Hot Creek is adjacent to the RGNF Hot Creek survey areas (Appendix C), but contains more habitat for flycatchers. Dominant vegetation was coyote and other willow species, as well as some junipers. Much of this survey area also consisted of marsh habitat. The mean height of the vegetation was about 3 m. Beaver activity was noted in the area during our surveys, causing much of the water from

Hot Creek to spread and form large pools. Water was also flowing through Hot Creek during each of the survey periods.

**LaJara State Wildlife Area.** -- This survey area included a 1.6 km portion of LaJara Creek (Appendix C) that contained some potential habitat for Southwestern Willow Flycatchers. Mountain alder, narrowleaf cottonwood, and juniper dominate the riparian corridor, with a mean height of about 3.5 m. Water level in the river increased during the second period, then decreased in the third period.

**Poso Creek.** -- This relatively small (0.9 km) section of Poso Creek contained only a few patches of habitat suitable for flycatchers (Appendix C). Dominant vegetation included willows, cottonwoods, and rabbitbrush, with a mean height of approximately 3 m. There was no water present during any of the survey periods.

**Rio Grande State Wildlife Area.** -- The Rio Grande State Wildlife Area (RGSWA) included an approximately 4.9 km stretch of riparian habitat along the Rio Grande. Because this site contained large areas of potential Southwestern Willow Flycatcher habitat, we divided it into 3 distinct sections for our surveys. RGSWA Section 1 included 2 km on the western portion of the site, on the south side of the river only, because the north side of the river is private land (Appendix C). This section of RGSWA was dominated by coyote willow and peachleaf willow (*Salix amygdaloides*), with a fairly dense cottonwood overstory. The mean height of the willows was about 4 m. RGSWA Sections 2 and 3 included the approximately 2.9 km eastern portion of the survey area. Section 2 included the north and Section 3 the south side of the river (Appendix C). Both sides of the river contained cottonwood overstory, and the understory vegetation was dominated by coyote willow and narrowleaf cottonwood, with a mean height of about 7 m. Sections 1 and 2 contained numerous large, dense patches of potential habitat for Southwestern Willow Flycatchers, whereas section 3 contained fewer suitable patches.

**Sego Spring State Wildlife Area.** -- This survey area include 1.3 km of the San Antonio River, east of the town of Manassa, dominated by coyote willow and narrowleaf cottonwood (Appendix C). The beginning of this site included some willow patches around two ponds, while the remainder contained riparian vegetation along both sides of the springs. The mean vegetation height in this survey area was approximately 4 m. As with many other study sites, water level decreased from the time of the first survey to the third survey.

## METHODS

We surveyed for Southwestern Willow Flycatchers following the protocol developed by Sogge et al. (1997), in accordance with the Federal Endangered Species Act. This protocol involves surveying for flycatchers by using the tape playback method. The presence of Willow Flycatchers was confirmed only if a bird responded to the tape by singing the distinctive song, "fitz-bew". One survey was conducted at each of the ANWR and CDOW sites during each of the following three survey periods, 15-31 May, 1-21 June, and 22 June-10 July. We also conducted three surveys at two of the RGNF sites, Conejos River Reaches 2 and 4. Because of logistical problems, all other RGNF sites were surveyed during the second and third periods

only. Consecutive flycatcher surveys at each site were conducted at least five days apart from each other, and were completed between approximately 6:00 and 10:00 a.m. When we detected Willow Flycatchers, we recorded their locations in UTM's, using a Garmin Global Positioning System (GPS), and mapped these locations on USGS 7.5" quadrangle maps. Flycatchers were only considered resident potential breeders if detected during the third survey period (Sogge et al. 1997). All flycatchers detected during periods 1 and 2 were considered migrants unless they were also observed during the third period (Sogge et al. 1997). In addition to recording the presence/absence of Southwestern Willow Flycatchers, observers also recorded other bird species seen or heard while conducting the surveys.

## RESULTS

### Alamosa National Wildlife Refuge

We detected a total of 3, 19, and 23 Willow Flycatchers on Alamosa National Wildlife Refuge during the first, second, and third survey periods, respectively (Appendix D). Most of these birds were found along the South Survey Route.

**Alamosa North Survey Route.** -- We did not detect any Southwestern Willow Flycatchers on the North Survey Route during the first survey period. However, we found 3 flycatchers during the second survey, and 4 during the third survey (Table 1, Appendix D). Brown-headed Cowbirds (*Molothrus ater*) were observed during each of the three survey periods (Appendix D).

**Alamosa South Survey Route.** -- We detected 3, 16, and 19 Willow Flycatchers in riparian habitat within the Alamosa South Survey Route during the first, second, and third survey periods, respectively (Table 1, Appendix D). Although we did not observe any nests or breeding behavior, we saw three pairs of flycatchers that were likely breeding pairs. In each case, a singing male was observed with another silent flycatcher in the same location. We detected Brown-headed Cowbirds during each of the three surveys at this site (Appendix D).

### Rio Grande National Forest

We did not detect any singing Southwestern Willow Flycatchers at any of the RGNF survey sites during any of our surveys (Table 1, Appendix D). We did, however, observe two *Empidonax* flycatchers at Reach 2 of Cat Creek during the second survey period (Appendix D). Both of these birds exhibited the "whit" call, characteristic of Southwestern Willow Flycatchers. This call is also performed by other *Empidonax* species; therefore, we could not conclude that these birds were Southwestern Willow Flycatchers. Brown-headed Cowbirds were observed at many of the RGNF survey areas, including Reach 2 of Cat Creek, the Conejos River sites, Deer Creek, Reaches 1 and 3 of the Tributary to Hot Creek, Ojito Creek, and both reaches of Rito Hondo (Appendix D).

Table 1. Number if Southwestern Willow Flycatchers detected during surveys at Alamosa National Wildlife Refuge (ANWR), the Rio Grande National Forest (RGNF), and Colorado Division of Wildlife (CDOW) State Wildlife Areas, 2002.

| Survey Area                          | Management Agency | Survey Length (km) | Survey Period |    |    |
|--------------------------------------|-------------------|--------------------|---------------|----|----|
|                                      |                   |                    | 1             | 2  | 3  |
| ANWR North Survey Route              | USFWS             | 1.6                | 0             | 3  | 4  |
| ANWR South Survey Route              | USFWS             | 14.5               | 3             | 16 | 19 |
| Higel State Wildlife Area            | CDOW              | 2.8                | 0             | 2  | 1  |
| Hot Creek State Wildlife Area        | CDOW              | 7.4                | 2             | 6  | 2  |
| LaJara State Wildlife Area           | CDOW              | 1.6                | 0             | 0  | 0  |
| Poso Creek                           | CDOW              | 0.9                | 0             | 0  | 0  |
| Rio Grande State Wildlife Area       | CDOW              | 4.9                | 11            | 22 | 26 |
| Sego Spring State Wildlife Area      | CDOW              | 1.3                | 2             | 0  | 0  |
| Bighorn Creek, Reach 2               | USFS              | 0.4                | 0             | 0  | 0  |
| Bighorn Creek, Reach 3               | USFS              | 0.3                | 0             | 0  | 0  |
| Bighorn Creek, Reach 4               | USFS              | 0.3                | 0             | 0  | 0  |
| Canyon Creek, Reach 2                | USFS              | 0.5                | 0             | 0  | 0  |
| Tributary to Canyon Creek, Reach 1   | USFS              | 0.4                | 0             | 0  | 0  |
| Cat Creek, Reach 2                   | USFS              | 1.1                | 0             | 0  | 0  |
| Cat Creek, Reach 4                   | USFS              | 0.5                | 0             | 0  | 0  |
| Deer Creek, Reach 2                  | USFS              | 0.5                | 0             | 0  | 0  |
| Conejos River, Reach 2 / Trail Gulch | USFS              | 1.7                | 0             | 0  | 0  |
| Conejos River, Reach 4               | USFS              | 1.5                | 0             | 0  | 0  |
| Hot Creek, Reach 3                   | USFS              | 0.5                | 0             | 0  | 0  |
| Hot Creek, Reach 4                   | USFS              | 0.7                | 0             | 0  | 0  |
| Tributary to Hot Creek, Reach 1      | USFS              | 0.3                | 0             | 0  | 0  |
| Tributary to Hot Creek, Reach 2      | USFS              | 0.3                | 0             | 0  | 0  |
| Tributary to Hot Creek, Reach 3      | USFS              | 0.3                | 0             | 0  | 0  |
| Ojito Creek, Reach 1                 | USFS              | 1.0                | 0             | 0  | 0  |
| Rito Hondo, Reach 1                  | USFS              | 0.3                | 0             | 0  | 0  |
| Rito Hondo, Reach 2                  | USFS              | 1.7                | 0             | 0  | 0  |

## Colorado Division of Wildlife

**Higel State Wildlife Area.** -- We did not detect Southwestern Willow Flycatchers during the first survey period at Higel SWA. However, we found two flycatchers during period two, and one flycatcher during period three (Table 1, Appendix D). Brown-headed Cowbirds were observed during all three surveys at Higel (Appendix D).

**Hot Creek State Wildlife Area.** -- We detected two, six, and two Willow Flycatchers at Hot Creek SWA during the first, second, and third survey periods, respectively (Table 1, Appendix D). We also observed two additional *Empidonax* flycatchers during each of the first and second surveys (Appendix D). In each case, one of these birds exhibited the "whit" call, while the other responded to the "fitz-bew" tape by flying towards the observer. The two additional birds observed during the first survey period were found in different locations than the two birds observed during the second period. Brown-headed Cowbirds were also present during all three surveys at Hot Creek (Appendix D).

**LaJara State Wildlife Area.** -- We did not find any Southwestern Willow Flycatchers at LaJara SWA during any of the survey periods (Table 1, Appendix D). We did, however, detect Brown-headed Cowbirds during these surveys. (Appendix D).

**Poso Creek.** -- No Southwestern Willow Flycatchers were detected at Poso Creek during any of the three surveys (Table 1, Appendix D). Brown-headed Cowbirds were observed during the second and third survey periods (Appendix D).

**Rio Grande State Wildlife Area.** -- We detected a total of 11, 22, and 26 Southwestern Willow Flycatchers at Rio Grande SWA during the first, second, and third survey periods, respectively (Table 1, Appendix D). The highest number of flycatchers was found in Section 2, with 5, 12, and 16 birds detected during the respective survey periods. Section 1 contained the next highest number of flycatchers, with 5, 9, and 10 birds observed during the three surveys. We found only two flycatchers in Section 3, with one detected in the first and one in the second survey period. Brown-headed Cowbirds were observed during all three surveys in Sections 1 and 2, and during the third survey only in Section 3 (Appendix D).

**Sego Spring State Wildlife Area.** -- We found two Willow Flycatchers at Sego Spring, both during the first survey period (Table 1, Appendix D). We also observed one *Empidonax* flycatcher in this area during the third survey. This bird responded to the "fitz-bew" tape by approaching the observer, but did not exhibit any vocalizations. We also observed Brown-headed Cowbirds during each of the three surveys at Sego Spring (Appendix D).

## DISCUSSION

While all the Willow Flycatchers we detected during the migratory period (periods 1 and 2) in the San Luis Valley exhibited the distinctive "fitz-bew" song, we cannot be certain that they were all Southwestern Willow Flycatchers. Some or all of these birds may have been one of the other subspecies of Willow Flycatchers (*Empidonax traillii adastus* or *E.t. campestris*) that breed



north of the Southwestern's breeding range (Sogge et al. 1997, Sedgwick 2000). Although there are subtle differences in song between the different subspecies, there is no protocol for distinguishing between subspecies, and we were unable to make this distinction in the field. All Willow Flycatchers detected during the non-migratory period (period 3) were, however, considered to be Southwestern Willow Flycatchers.

### **Alamosa National Wildlife Refuge**

Riparian habitat in ANWR, especially along the South Survey Route, appears to be very attractive to Southwestern Willow Flycatchers. We observed three pairs within the South Survey Area, but there were likely more potential breeding pairs within the refuge. The North Survey Route was smaller and contained far less suitable habitat for flycatchers, yet several birds were found there during the non-migratory (third) period. Although we found the second highest number of Willow Flycatchers at ANWR, Brown-headed Cowbirds were also found in this area during all three surveys. Brood parasitism by Brown-headed Cowbirds may result in low reproductive success for flycatchers. More intense research is needed on Southwestern Willow Flycatcher nesting success in ANWR to assess the effects of cowbird parasitism on the flycatcher population.

### **Rio Grande National Forest**

Although we were not able to conduct surveys at most of the RGNF sites during the first survey period, there were likely no Southwestern Willow Flycatchers present in those areas at that time. More than half of the RGNF sites did not contain habitat suitable for this species. Only three sites, Conejos River Reach 2/Trail Gulch, Conejos River Reach 4, and Rito Hondo Reach 2, contained significant amounts of potential habitat for flycatchers. Four other sites, Cat Creek Reaches 2 and 4, Deer Creek Reach 2, and Ojito Creek, contained one or a few small patches of marginal flycatcher habitat. Of these sites, both reaches of the Conejos River and Trail Gulch were surveyed during the first period, and no birds were detected. All of these areas appeared to be more suitable for Southwestern Willow Flycatchers than Reach 2 of Rito Hondo. Because flycatchers were detected during the first period at other sites in the San Luis Valley, we cannot be absolutely certain they were absent at the RGNF sites during the first survey period. However, because we did not detect any flycatchers at the RGNF sites containing the best potential habitat, we assume that flycatchers were absent.

### **Colorado Division of Wildlife**

Rio Grande State Wildlife Area clearly contains attractive habitat for Southwestern Willow Flycatchers. Most of the flycatchers that were detected were located within Sections 1 and 2, which contained more potential flycatcher habitat than Section 3. In both Sections 1 and 2, the number of birds increased with each successive survey period. While some of the birds detected during the first two periods may have been migrants, many or all of them could also have arrived at this site early in the season, to pair up and potentially breed. We only identified two pairs in Rio Grande SWA, however, based on the territorial behavior of singing males, there were likely more pairs of birds in the area. The birds detected during the first and second periods in Section 3 were likely migrants, however, as no birds were relocated during the third survey

period. As in ANWR, the presence of Brown-headed Cowbirds within this flycatcher hotspot may affect local nesting success, and future studies should focus on monitoring flycatcher nests and reproductive success.

Higel and Hot Creek State Wildlife Areas also appear to be attractive to Southwestern Willow Flycatchers. Even though we only found a few birds at Higuel SWA, at least one was present during the third survey period, and could have potentially bred in the area. At Hot Creek, we can only confirm two males during the non-migratory period, but clearly this area contains appropriate habitat for flycatchers. We did not observe any pairs or nesting behavior at Hot Creek; however, we did observe some *Empidonax* flycatchers displaying the "whit" call. Some or all of these birds may have been female Southwestern Willow Flycatchers.

Of the remaining CDOW survey sites, Sego Springs State Wildlife Areas may have the most potential habitat for Southwestern Willow Flycatchers. We did detect two flycatchers at Sego Springs during the first period, and one *Empidonax* and potential Southwestern Willow Flycatcher during the third period. The presence of Willow Flycatchers during the migratory period, however, is not conclusive evidence that habitat is suitable for Southwestern Willow Flycatchers, as migrants have been found in riparian habitats considered unsuitable for breeding (Sogge et al. 1997).

Both LaJara and Poso Creek State Wildlife Areas appear to be only marginally suitable for Southwestern Willow Flycatchers. LaJara includes a much larger stretch of riparian habitat than Poso Creek; however it lacks the distinctive dense patches of young willow and cottonwood that is typical flycatcher habitat. Poso Creek does contain a small amount of such habitat, but it is probably too small to attract breeding Southwestern Willow Flycatchers.

## RECOMMENDATIONS

1. Continue to monitor Alamosa National Wildlife Refuge for the presence/absence of Southwestern Willow Flycatchers. In addition, we recommend an intense study of nesting success of flycatchers in the ANWR survey areas because of the relatively high density of birds on the refuge.
2. Continue to monitor Higuel, Hot Creek, LaJara, Poso Creek, Rio Grande, and Sego Springs State Wildlife Areas for the presence/absence of Southwestern Willow Flycatchers. We also recommend an intense study of nesting success of flycatchers in Rio Grande SWA because of the relatively high density of birds in this area.
3. Continue to monitor Rito Hondo, Reach 2 and Reaches 2 and 4 of the Conejos River for the presence/absence of Southwestern Willow Flycatchers. Although we did not detect flycatchers in these areas in 2002, they do contain some suitable habitat for this species.

## **ACKNOWLEDGEMENTS**

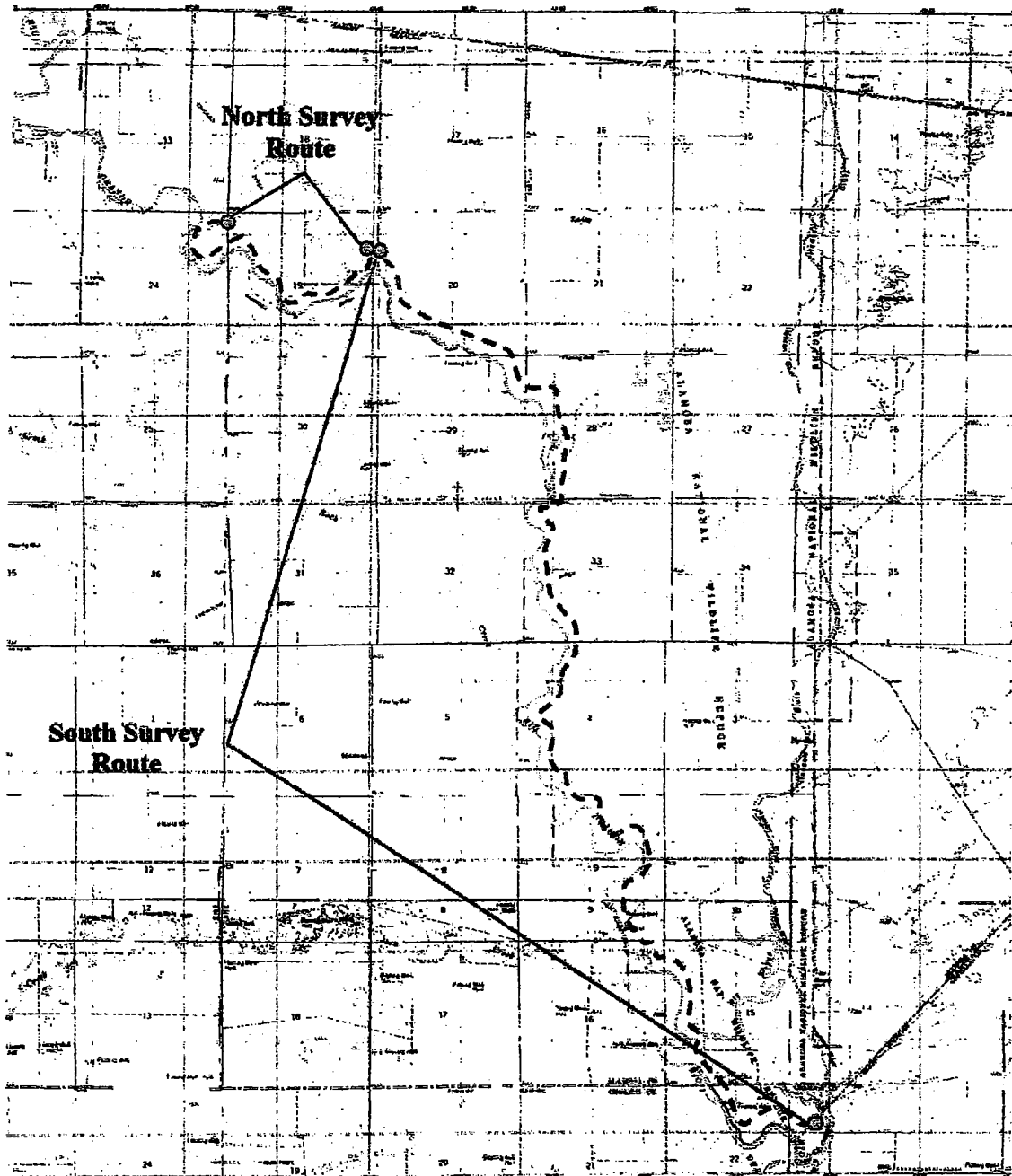
This project was funded by the U.S. Fish and Wildlife Service, the U.S. Forest Service, and the Colorado Division of Wildlife. Field investigations were conducted by Lynn Alterman, Karen Epperson, Geoff Evans, Rich Sim, and Barry Southard. This report was prepared by Lynn Alterman, with assistance from Gail Garber.

## LITERATURE CITED

- Bureau of Land Management. 1998. Birds as indicators of riparian vegetation condition in the western U.S. Bureau of Land Management, Partners in Flight, Boise, Idaho. BLM/ID/PT-98/004+6635. Jamestown, ND: Northern Prairie Wildlife Research Center home page.
- New Mexico Partners in Flight. 2000. Partners in Flight draft land bird conservation plan – New Mexico state plan. Albuquerque, NM.
- Sedgwick, J. A. 2000. Willow Flycatcher (*Empidonax traillii*). In The birds of North America, no. 533 (A. Poole and F. Gill, eds.). The Academy of Natural Sciences, Philadelphia, PA, and The American Ornithologists' Union, Washington, D.C.
- Sogge, M., R. M. Marshall, S. J. Sferra, and T. J. Tibbitts. 1997. A Southwestern Willow Flycatcher natural history summary and survey protocol. National Park Service Technical Report NPS/NAUCPRS/NRTR-97/12.
- U.S. Fish and Wildlife Service. 1995. Final rule determining endangered status for the Southwestern Willow Flycatcher. Federal Register 60: 10694-10715 (February 27, 1995).

APPENDIX A.

Alamosa National Wildlife Refuge Southwestern Willow Flycatcher Survey Areas  
Alamosa East, Pikes Stockade, and Lasauces USGS 7.5' Quadrangles



0 1 kilometers

- Boundaries for Alamosa National Wildlife Refuge North Survey Route
- Boundaries for Alamosa National Wildlife Refuge South Survey Route
- - Survey Route



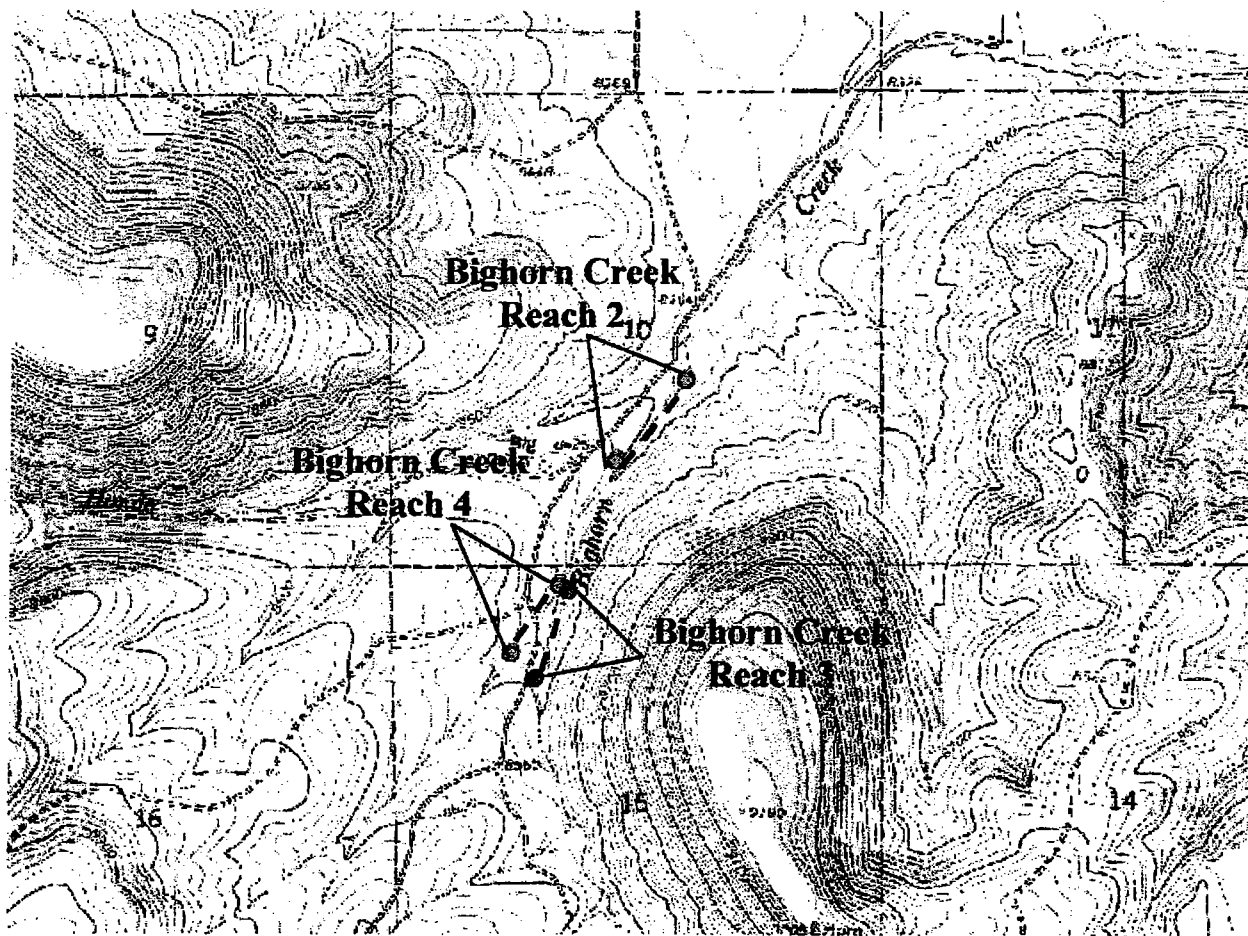
APPENDIX A, cont.



Photograph of Alamosa National Wildlife Refuge Southwestern Willow Flycatcher survey area.

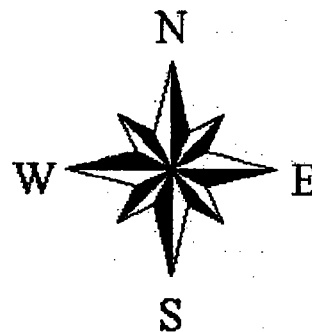
APPENDIX B.

**Bighorn Creek Southwestern Willow Flycatcher Survey Areas**  
**Fox Creek USGS 7.5' Quadrangle**



0 1 Kilometers

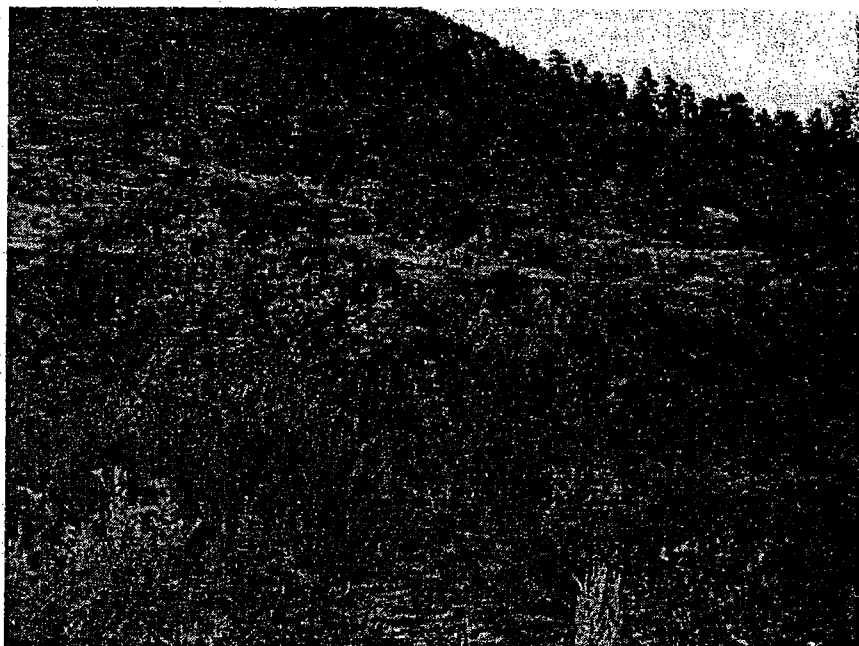
- Boundaries for Bighorn Creek Reach 2
- Boundaries for Bighorn Creek Reach 3
- Boundaries for Bighorn Creek Reach 4
- Survey Routes



**APPENDIX B, cont.**



**Photograph of Bighorn Creek Reach 2 Southwestern Willow Flycatcher survey area.**

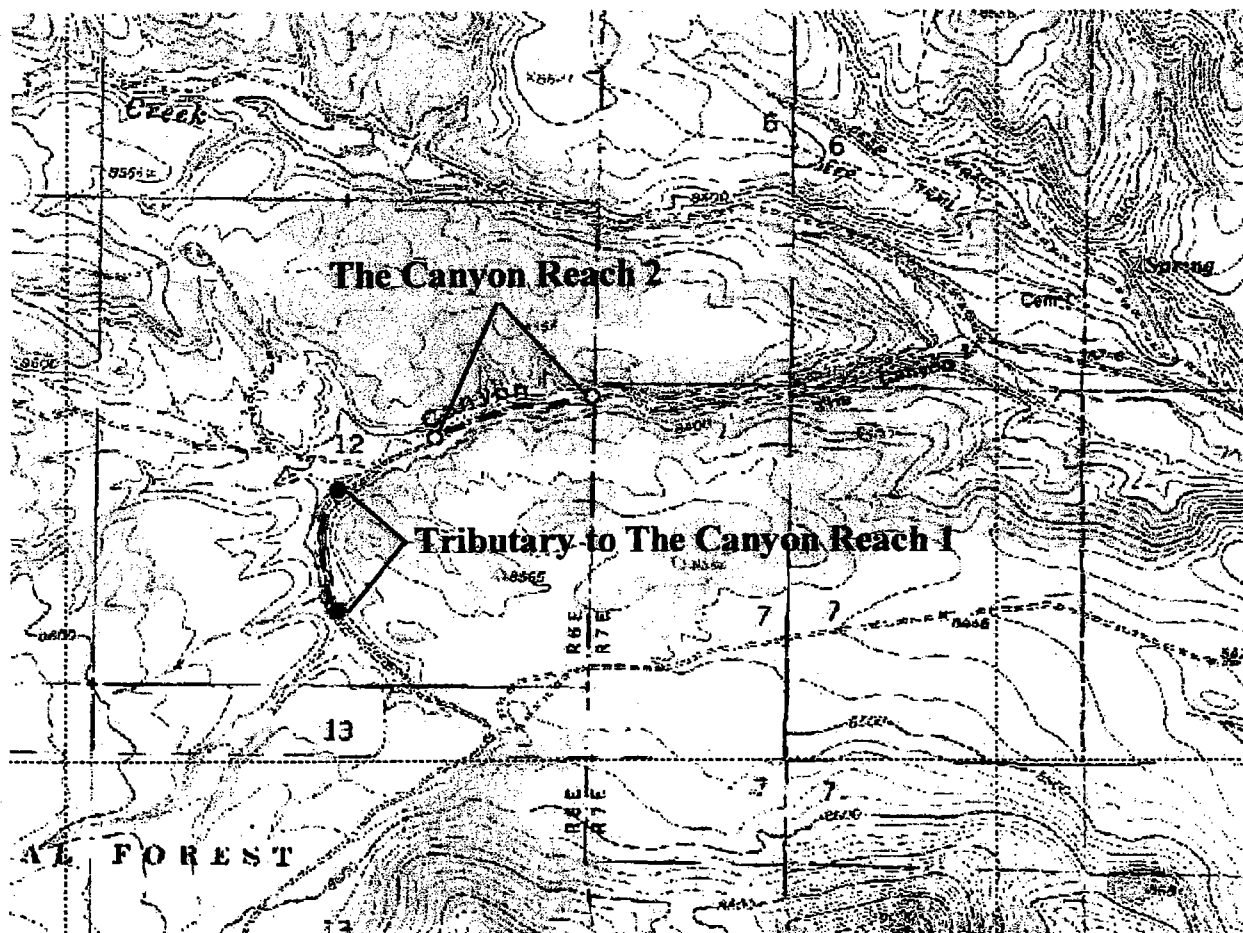


**Photograph of the junction of Bighorn Creek Reaches 3 and 4 Southwestern Willow Flycatcher survey areas.**



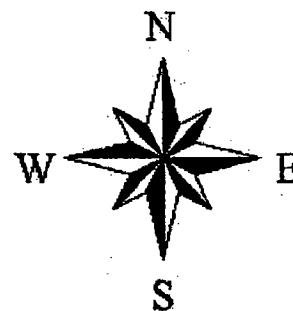
APPENDIX B, cont.

The Canyon and Tributary to The Canyon Southwestern Willow Flycatcher Survey Areas  
Greenie Mountain USGS 7.5' Quadrangle

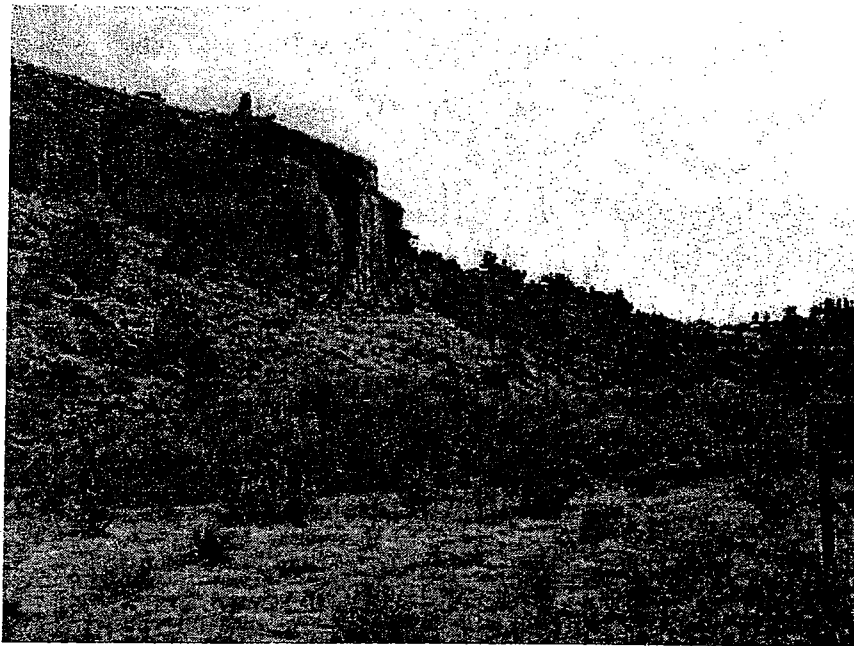


0 1 Kilometers

- Boundaries for The Canyon Reach 2
- Boundaries for Tributary to The Canyon Reach 1
- - - Survey Routes



**APPENDIX B, cont.**



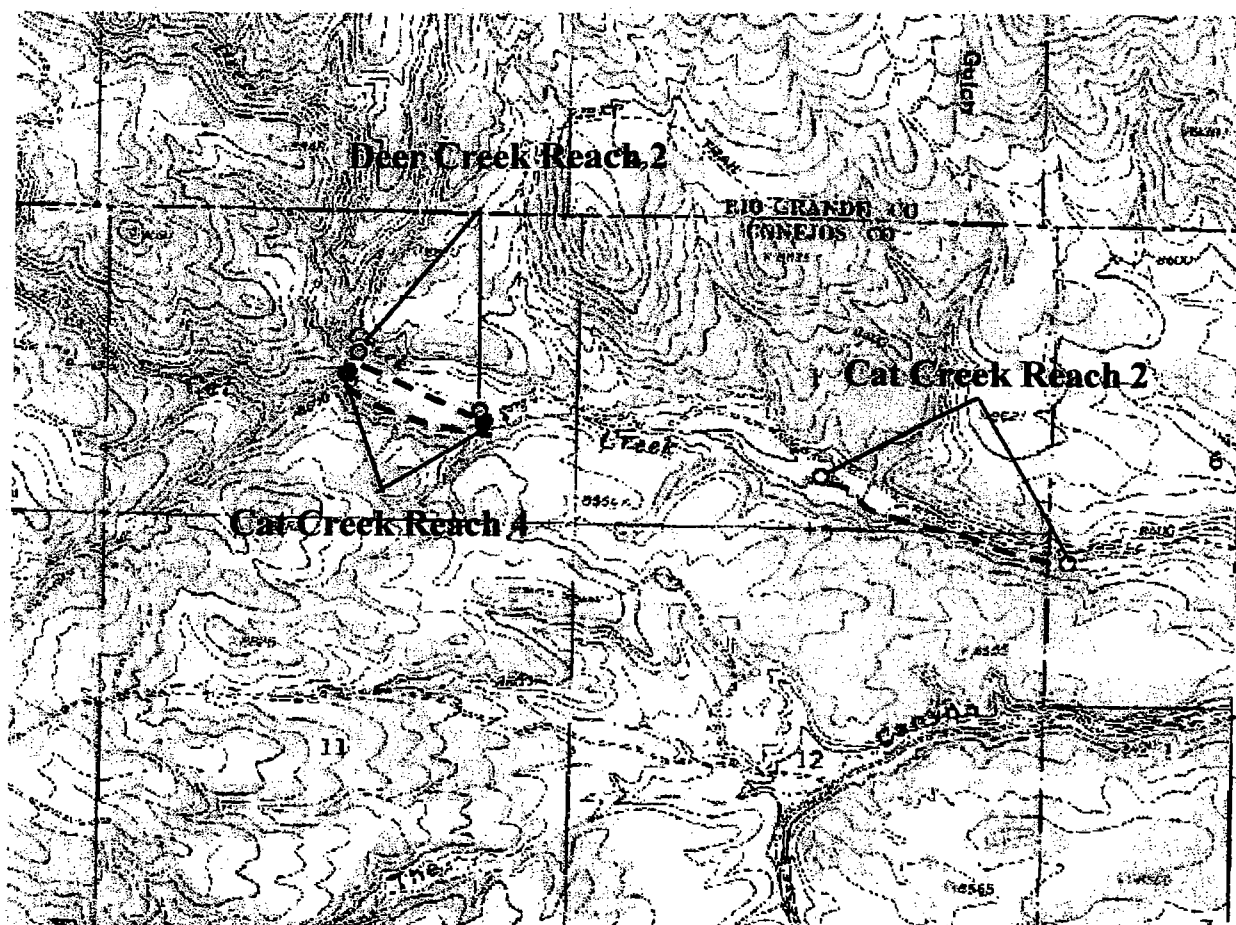
**Photograph of The Canyon Southwestern Willow Flycatcher survey area.**



**Photograph of Tributary to The Canyon Southwestern Willow Flycatcher survey area.**

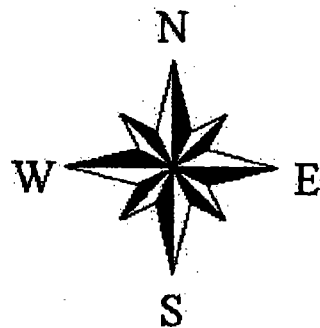
APPENDIX B, cont.

Cat Creek and Deer Creek Southwestern Willow Flycatcher Survey Areas  
Greenie Mountain USGS 7.5' Quadrangle



0 1 Kilometers

- Boundaries for Cat Creek Reach 2
- Boundaries for Cat Creek Reach 4
- Boundaries for Deer Creek Reach 2
- Survey Routes



**APPENDIX B, cont.**

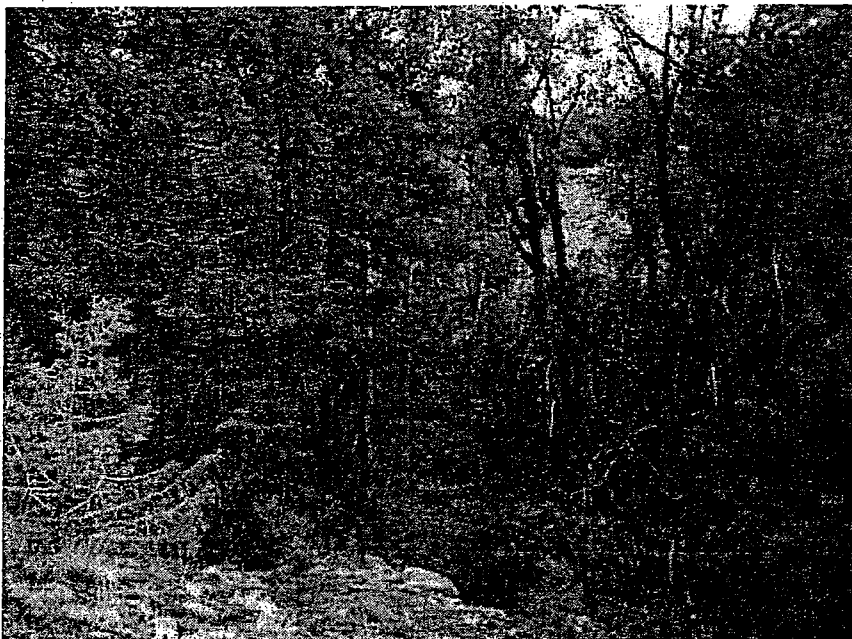


Photograph of Cat Creek Reach 2 Southwestern Willow Flycatcher survey area.



Photograph of Cat Creek Reach 4 Southwestern Willow Flycatcher survey area.

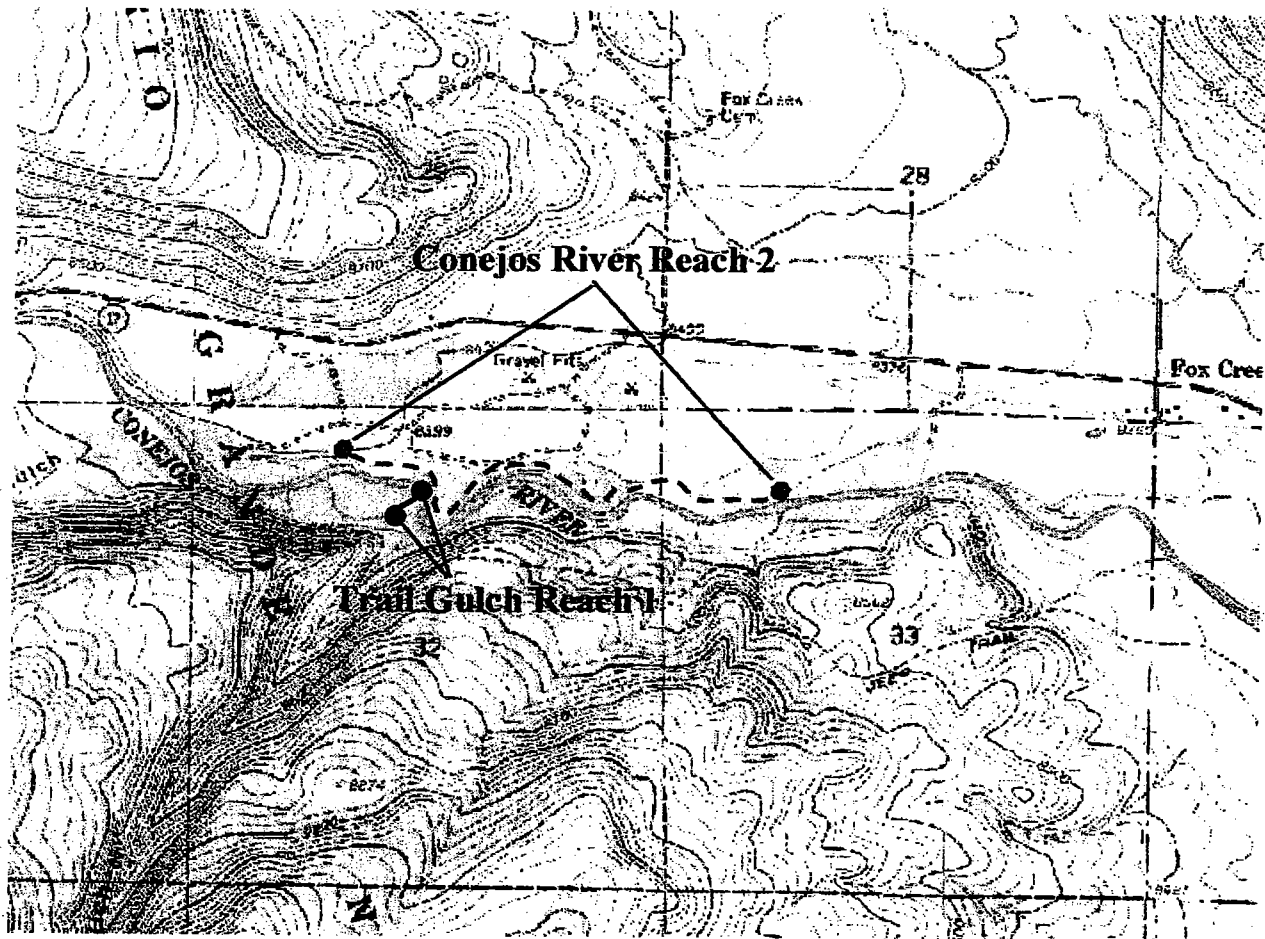
**APPENDIX B, cont.**



**Photograph of Deer Creek Reach 2 Southwestern Willow Flycatcher survey area.**

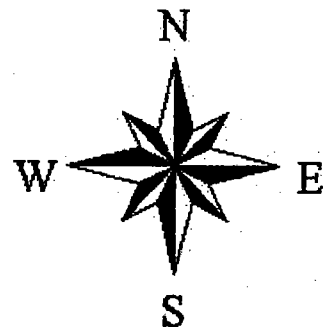
APPENDIX B, cont.

Conejos River Reach 2 and Trail Gulch Southwestern Willow Flycatcher Survey Areas  
Fox Creek USGS 7.5' Quadrangle

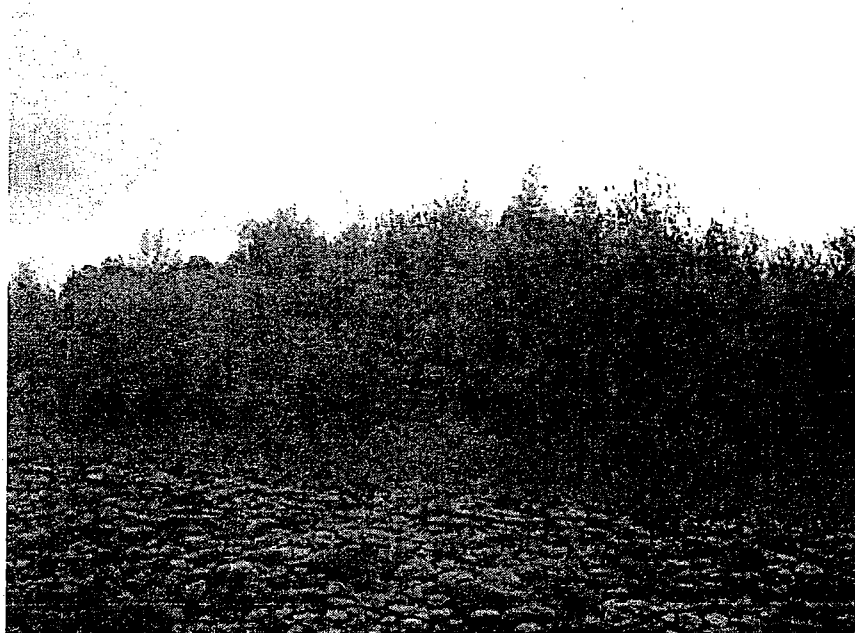


0 1 Kilometers

- Boundaries for Conejos River Reach 2
- Boundaries for Trail Gulch Reach 1
- Survey Routes



**APPENDIX B, cont.**



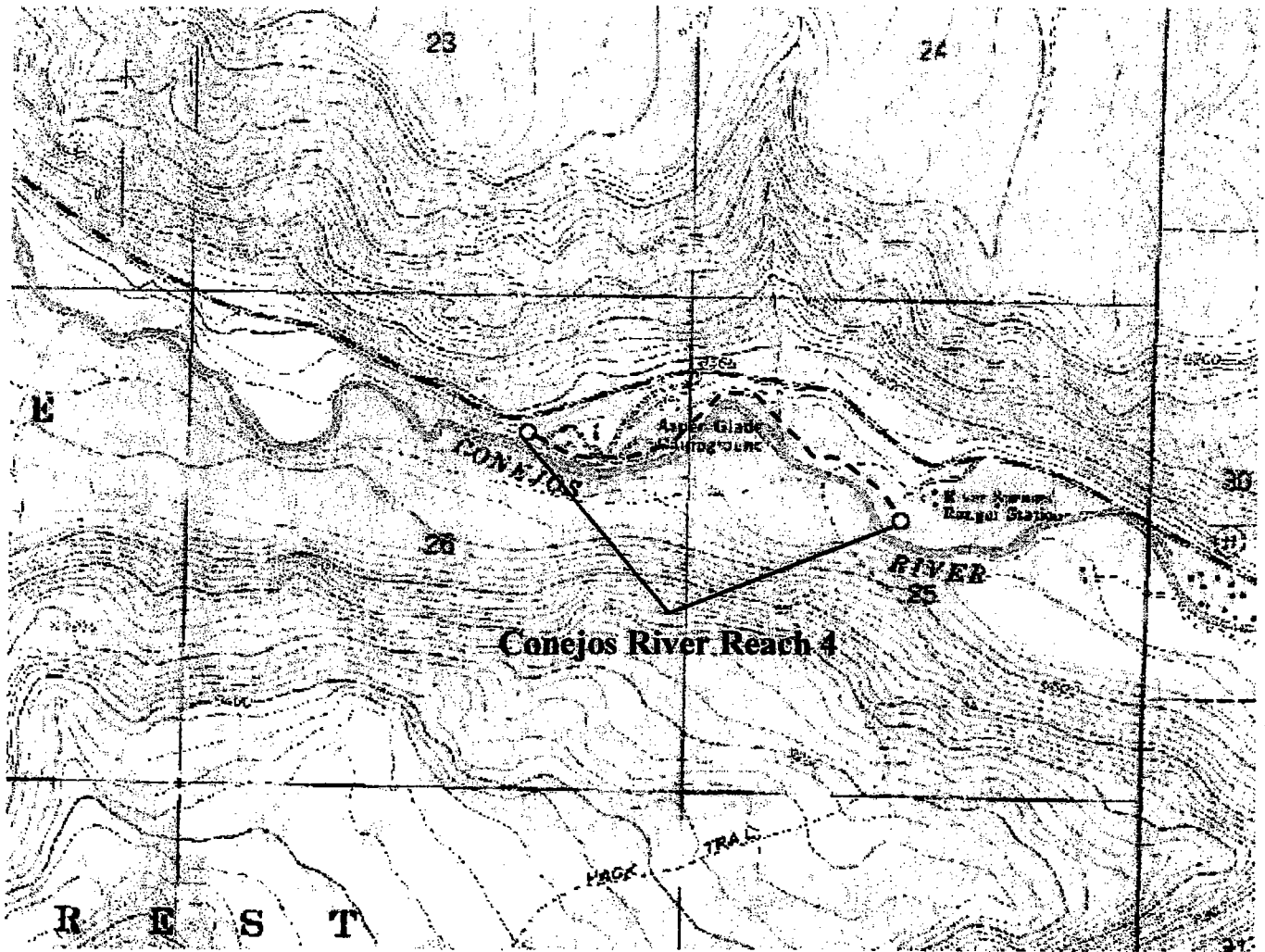
Photograph of Conejos River Reach 2 Southwestern Willow Flycatcher survey area.



Photograph of Trail Gulch Southwestern Willow Flycatcher survey area.

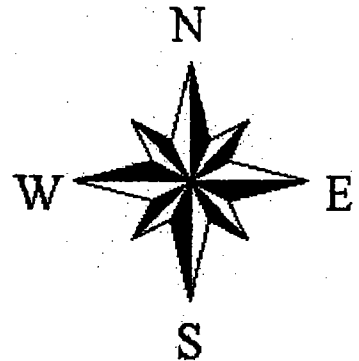
APPENDIX B, cont.

Conejos River Reach 4 Southwestern Willow Flycatcher Survey Area  
Osier USGS 7.5' Quadrangle



0 1 Kilometers

- Survey Area Boundaries
- Survey Route





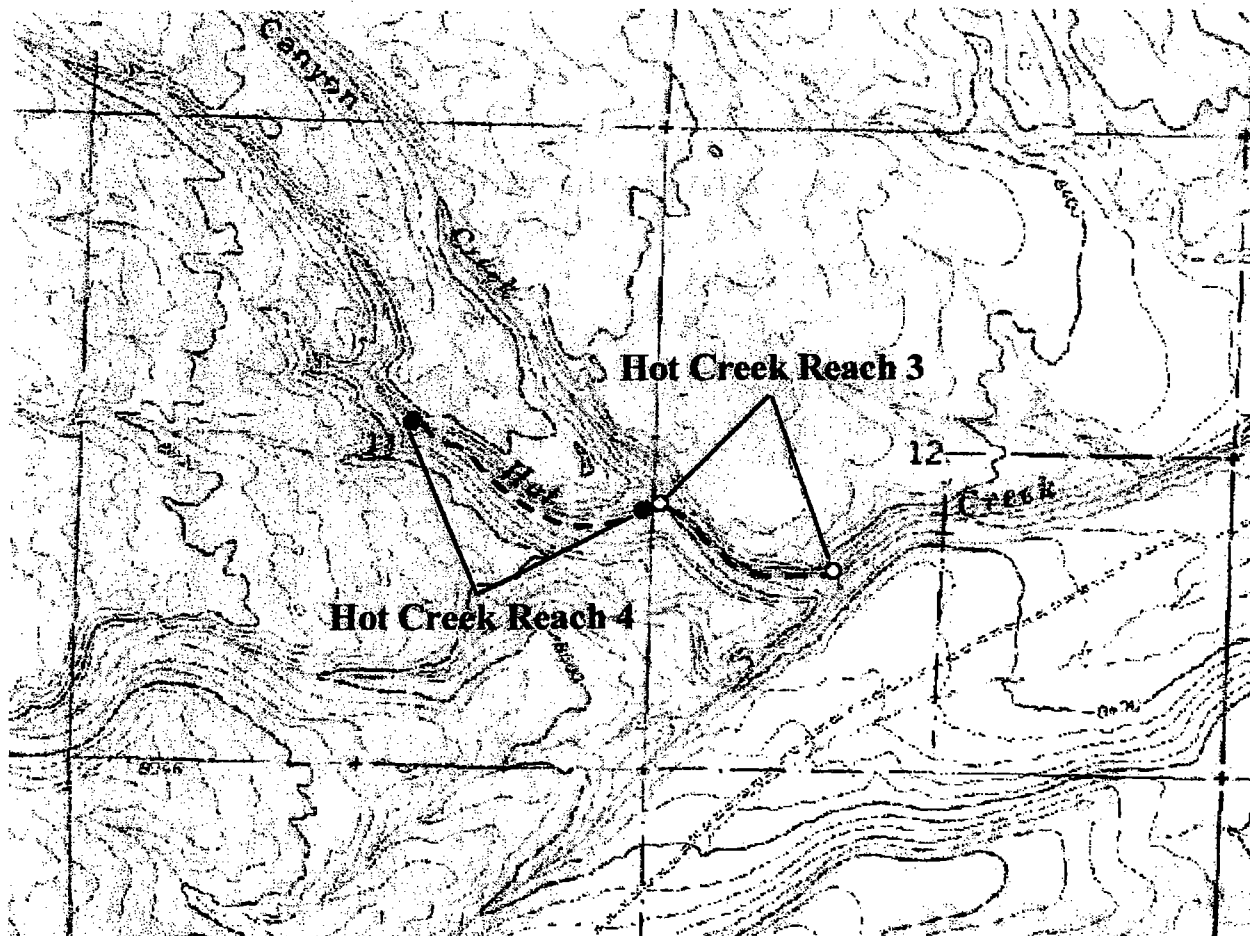
**APPENDIX B, cont.**



**Photograph of Conejos River Reach 4 Southwestern Willow Flycatcher survey area.**

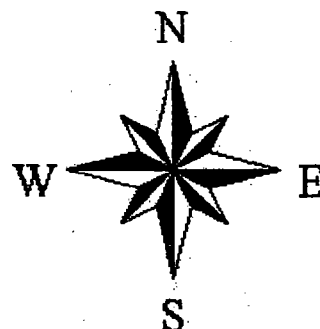
APPENDIX B, cont.

Hot Creek Southwestern Willow Flycatcher Survey Areas  
Terrace Reservoir USGS 7.5' Quadrangle

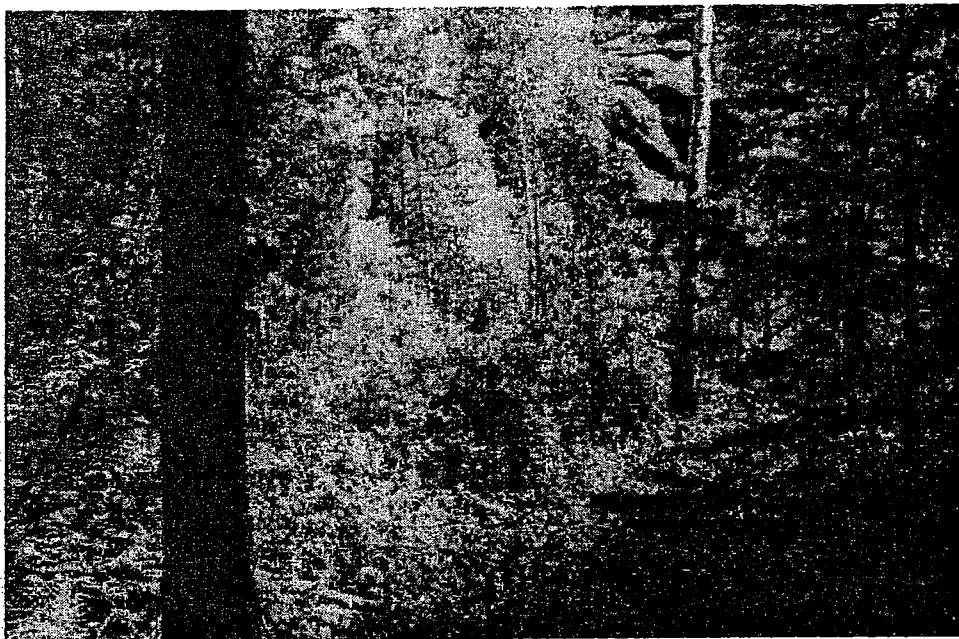


0 1 Kilometers

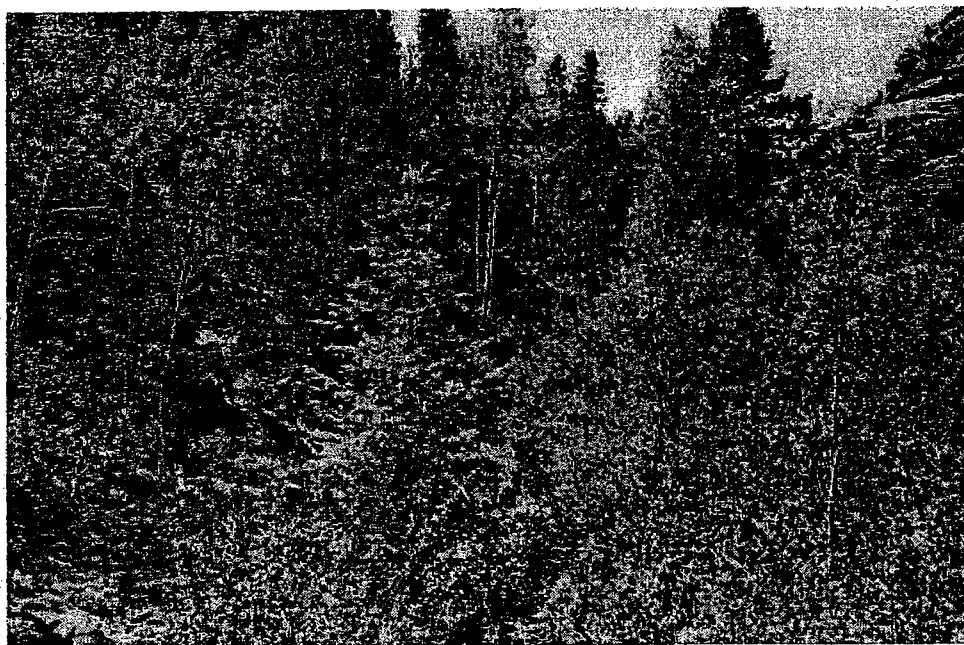
- Boundaries for Hot Creek Reach 3
- Boundaries for Hot Creek Reach 4
- Survey Routes



**APPENDIX B, cont.**



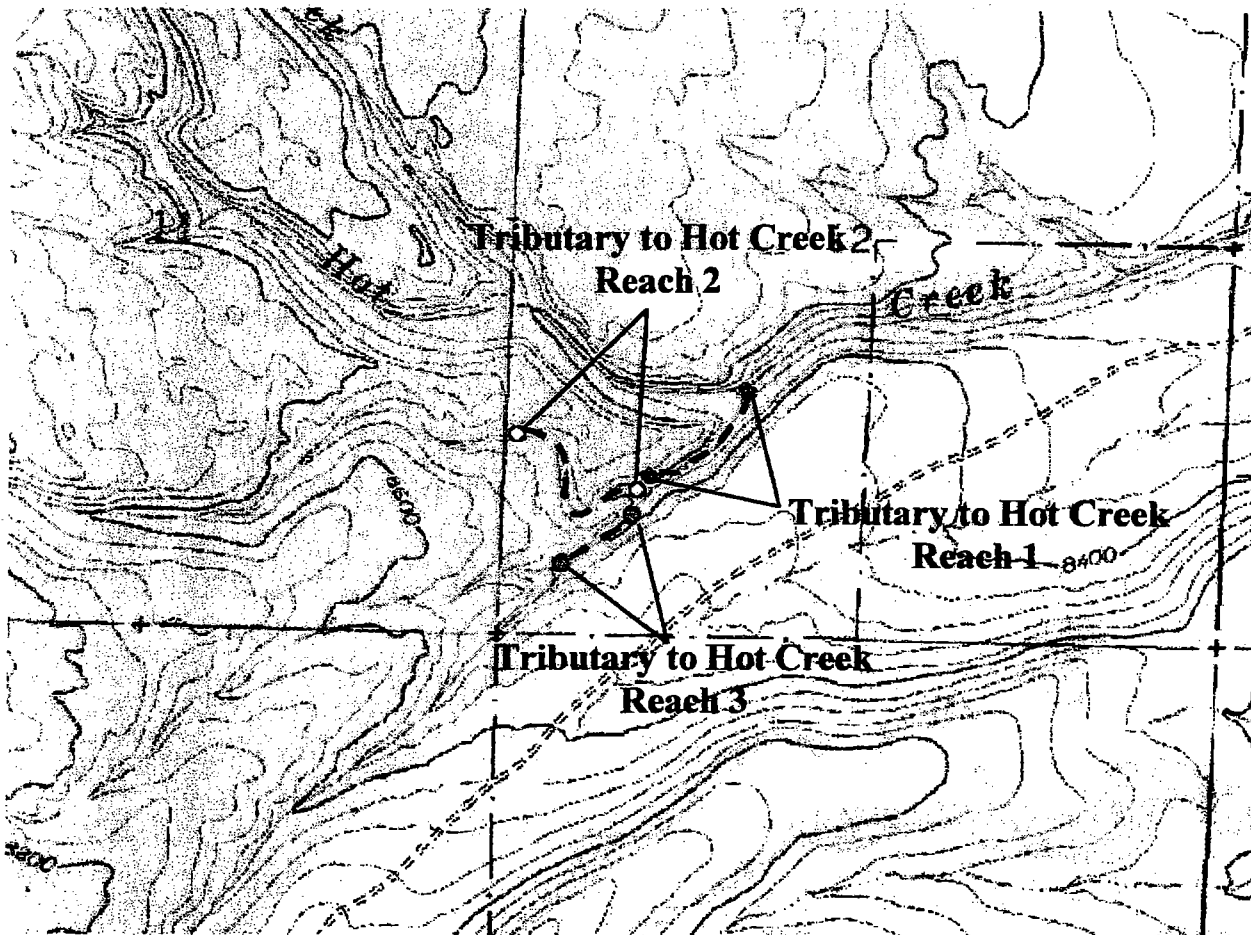
Photograph of Hot Creek Reach 3 Southwestern Willow Flycatcher survey area.



Photograph of Hot Creek Reach 4 Southwestern Willow Flycatcher survey area.

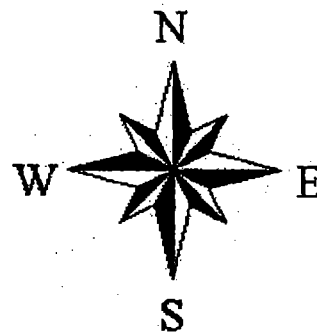
APPENDIX B, cont.

Tributary to Hot Creek Southwestern Willow Flycatcher Survey Areas  
Terrace Reservoir USGS 7.5' Quadrangle



0 1 Kilometers

- Boundaries for Tributary to Hot Creek Reach 1
- Boundaries for Tributary to Hot Creek Reach 2
- ⊙ Boundaries for Tributary to Hot Creek Reach 3
- Survey Route



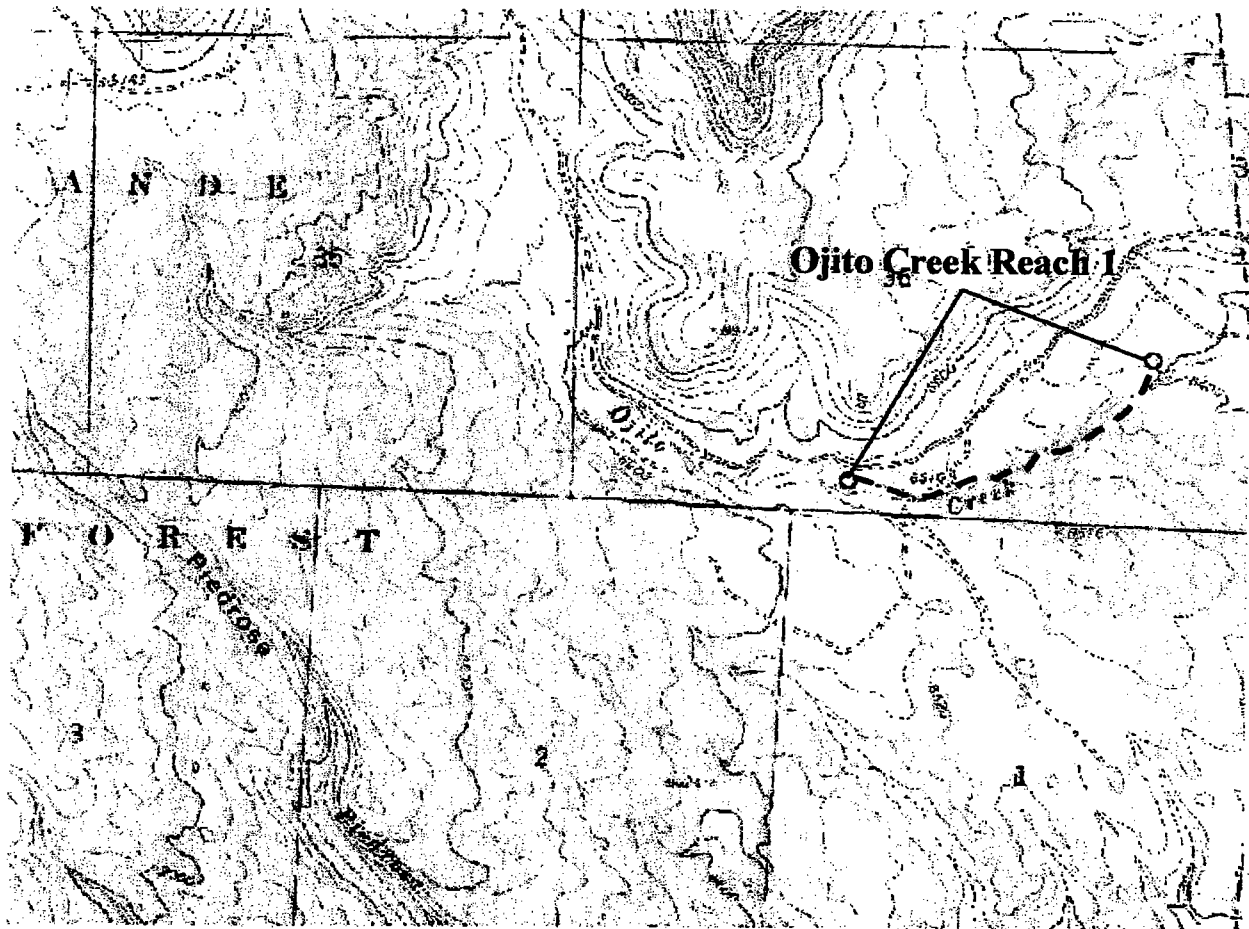
**APPENDIX B, cont.**



Photographs of Tributary to Hot Creek Southwestern Willow Flycatcher survey areas.

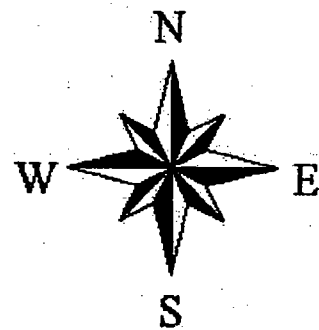
APPENDIX B, cont.

Ojito Creek Reach 1 Southwestern Willow Flycatcher Survey Area  
Terrace Reservoir USGS 7.5' Quadrangle



0 1 Kilometers

- Boundaries for Ojito Creek Reach 1
- - - Survey Route



**APPENDIX B, cont.**

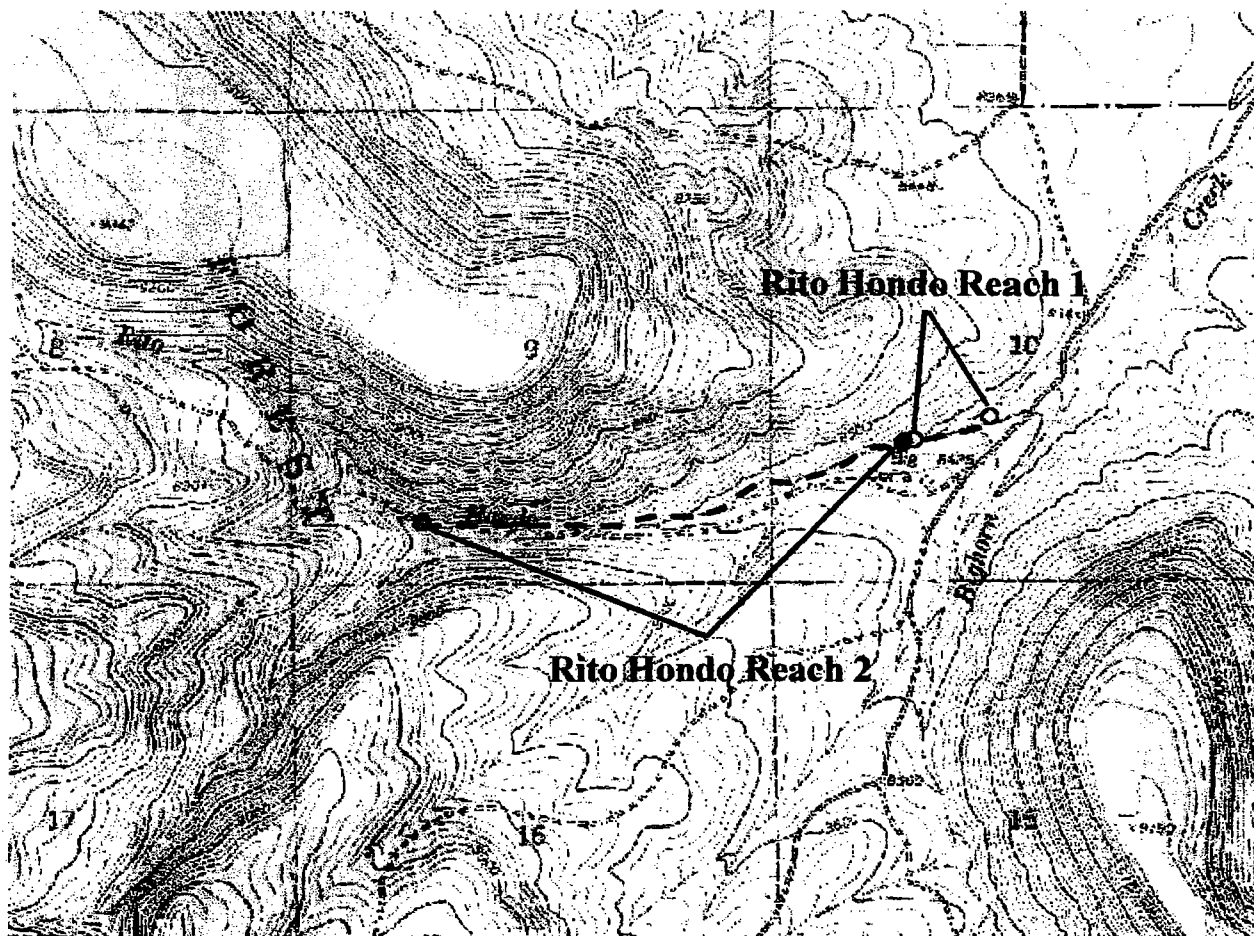


**Photograph of Ojito Creek Southwestern Willow Flycatcher survey area.**

APPENDIX B, cont.

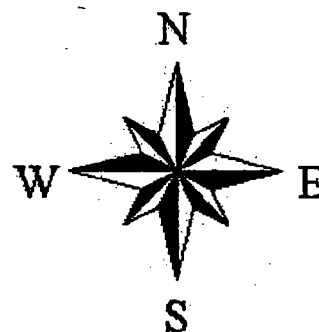
Rito Hondo Southwestern Flycatcher Survey Areas

Fox Creek USGS 7.5' Quadrangle



0 1 Kilometers

- Boundaries for Rito Hondo Reach 1
- Boundaries for Rito Hondo Reach 2
- - - Survey Route





**APPENDIX B, cont.**



**Photograph of Rito Hondo Reach 1 Southwestern Willow Flycatcher survey area.**



**Photograph of Rito Hondo Reach 2 Southwestern Willow Flycatcher survey area.**



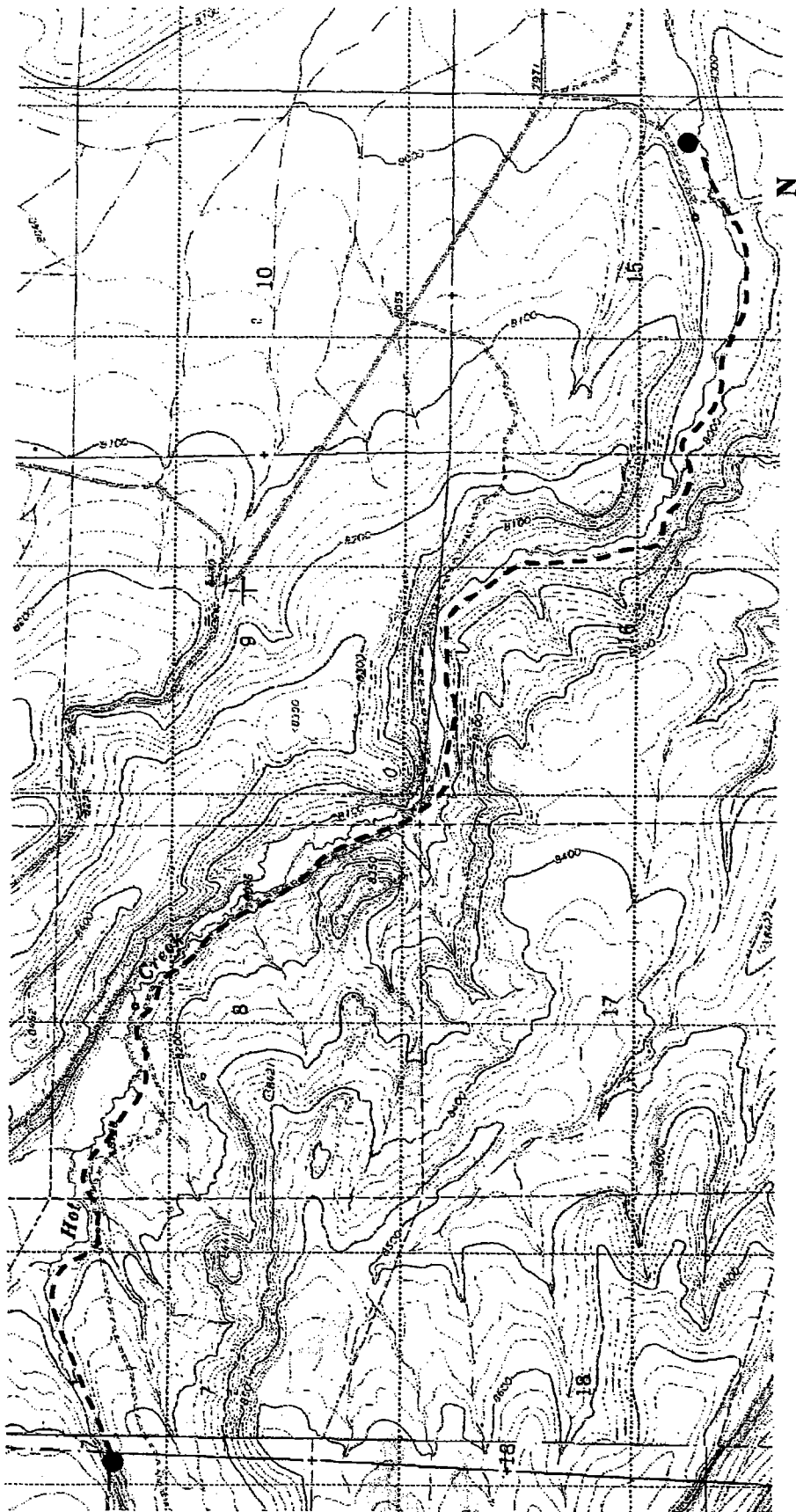
**APPENDIX C, cont.**



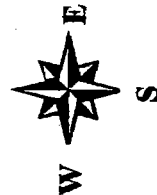
**Photograph of Higel State Wildlife Area Southwestern Willow Flycatcher survey site.**

APPENDIX C, cont.

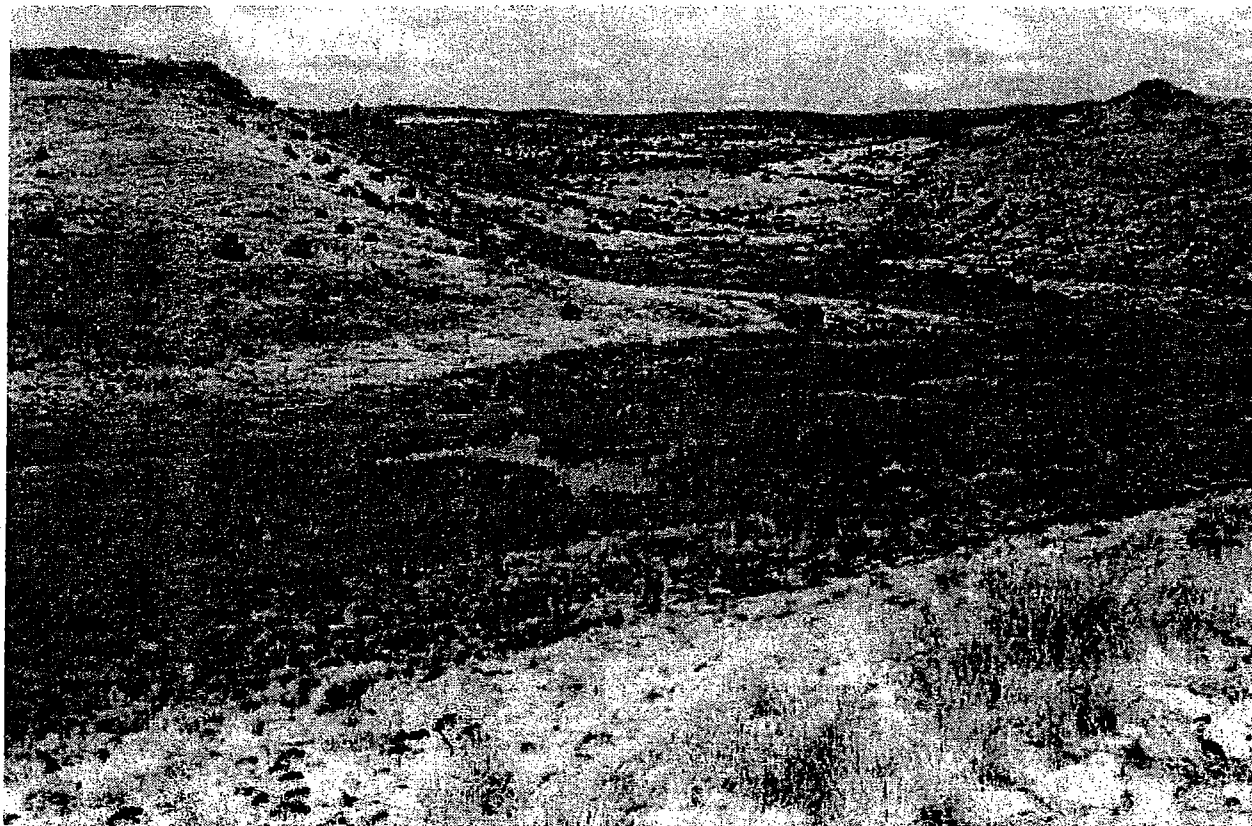
Hot Creek State Wildlife Area Southwestern Willow Flycatcher Survey Area  
Terrace Reservoir and Centro USGS 7.5' Quadrangles



0 1 kilometers  
● Survey Area Boundaries  
-- Survey Route



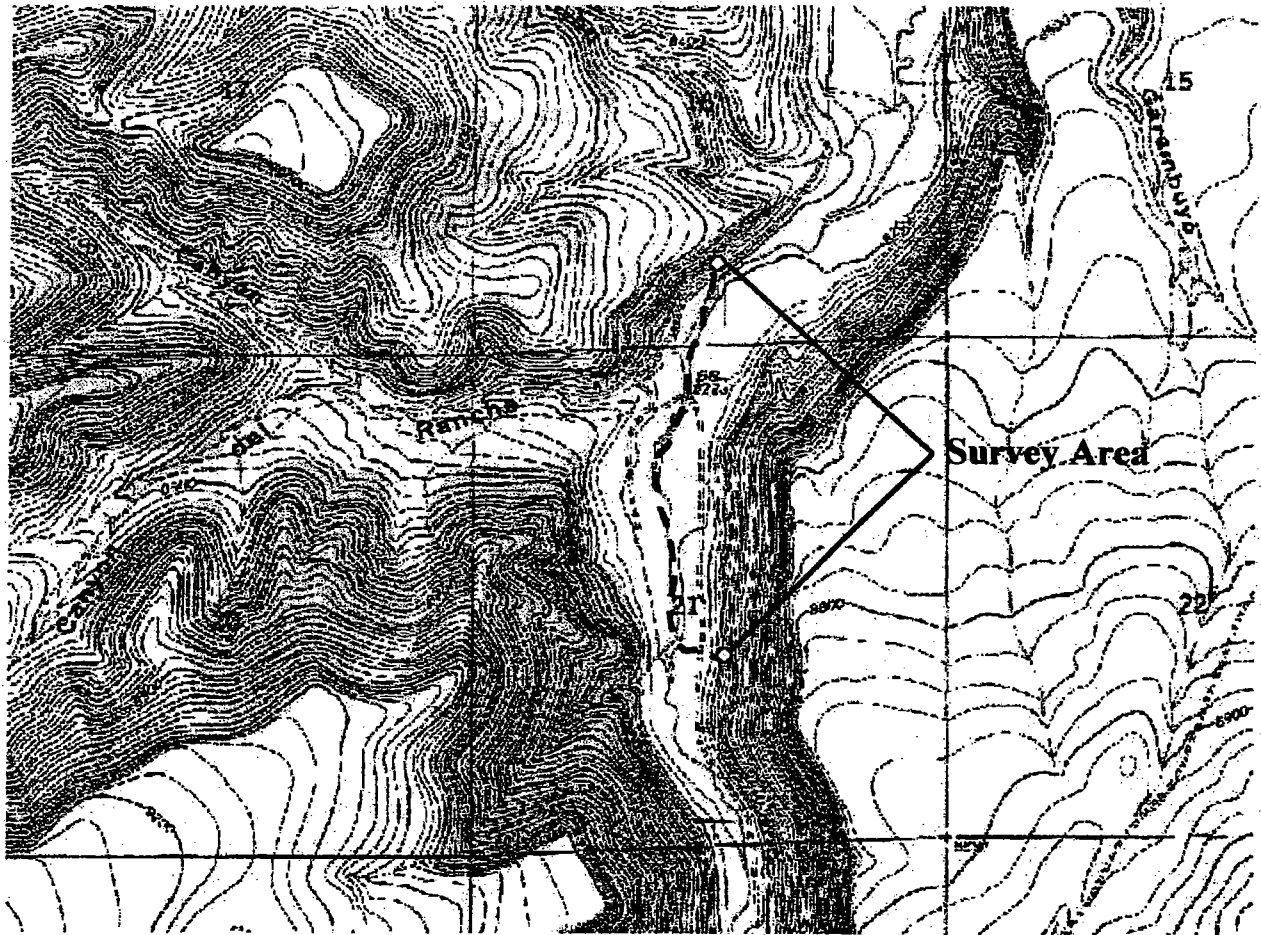
**APPENDIX C, cont.**



**Photograph of Hot Creek State Wildlife Area Southwestern Willow Flycatcher survey site.**

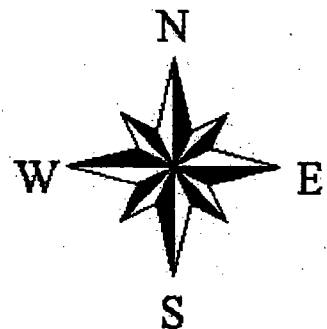
APPENDIX C, cont.

LaJara State Wildlife Area Southwestern Willow Flycatcher Survey Area  
Vincente Canyon USGS 7.5' Quadrangle



0 1 Kilometers

- Survey Area Boundaries
- Survey Route



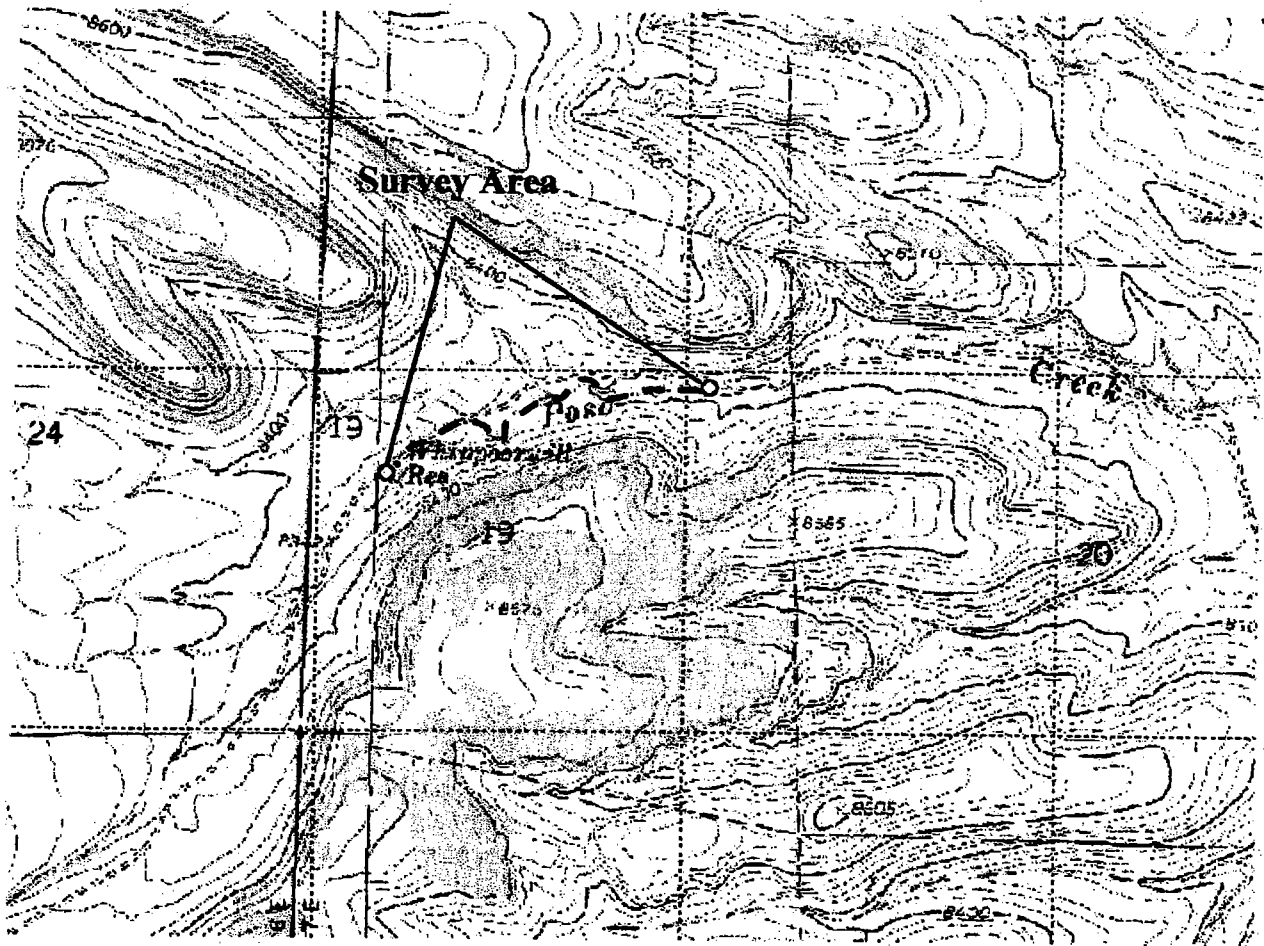
**APPENDIX C, cont.**



**Photograph of LaJara State Wildlife Area Southwestern Willow Flycatcher survey site.**

APPENDIX C, cont.

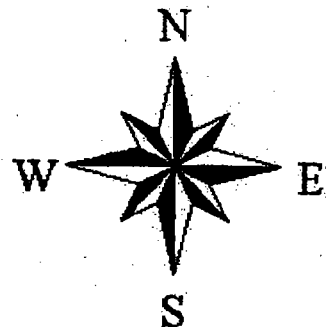
Poso Creek State Wildlife Area Southwestern Willow Flycatcher Survey Area  
Terrace Reservoir USGS 7.5' Quadrangle



0 1 Kilometers

○ Survey Area Boundaries

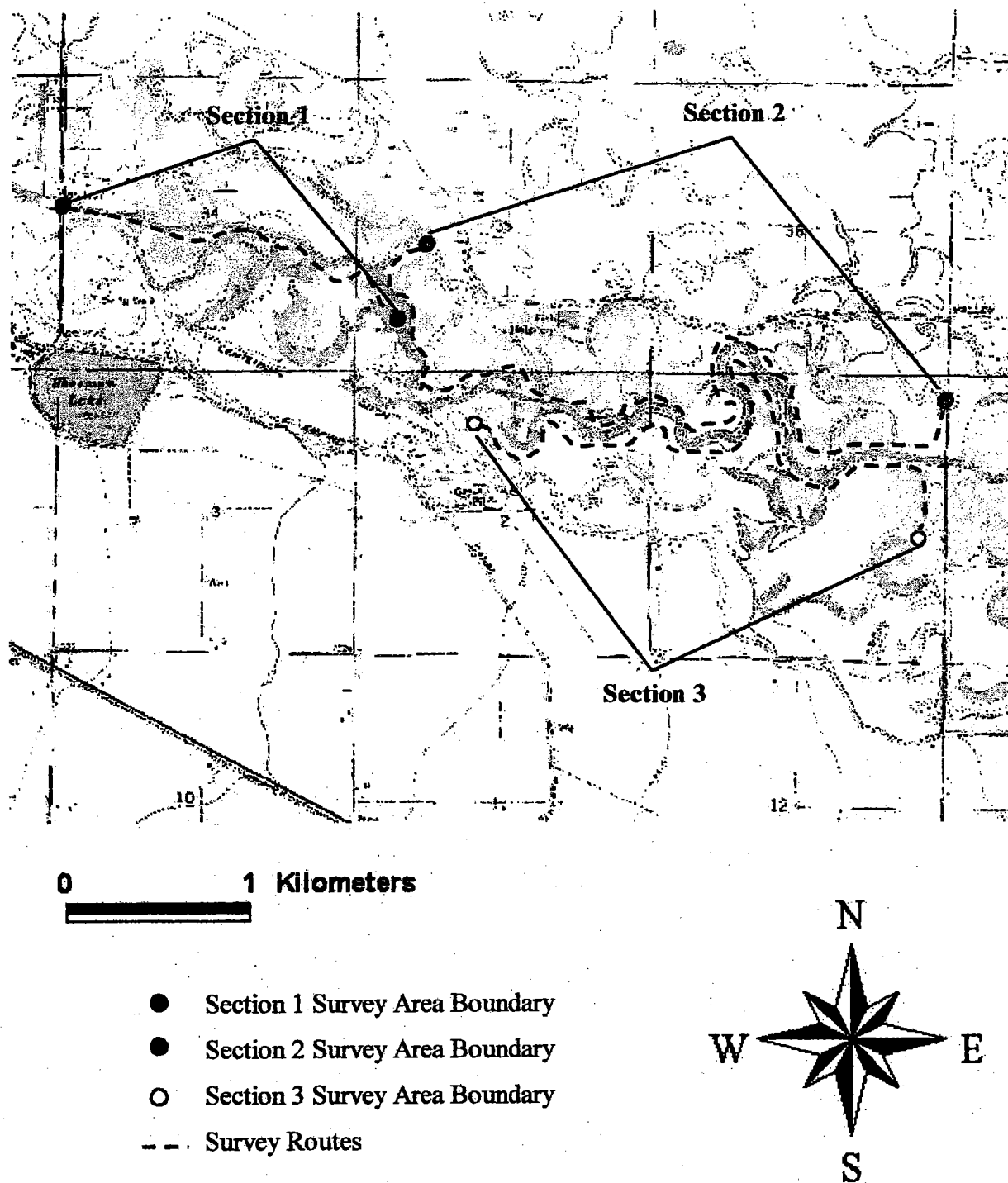
-- Survey Route



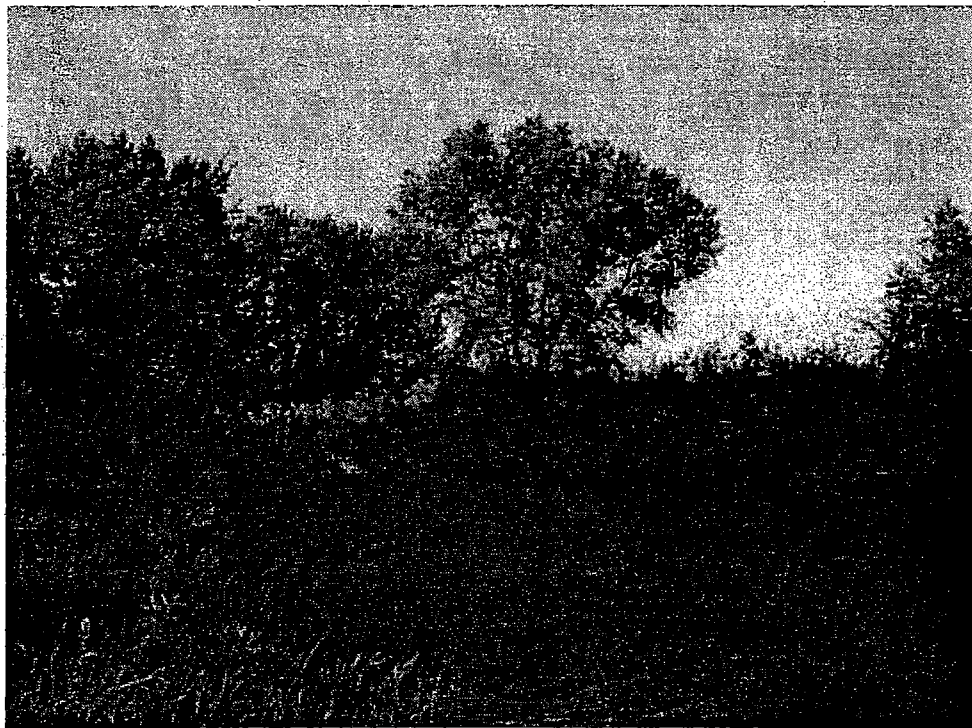


APPENDIX C, cont.

Rio Grande State Wildlife Area Southwestern Willow Flycatcher Survey Area  
Homelake USGS 7.5' Quadrangle



**APPENDIX C, cont.**

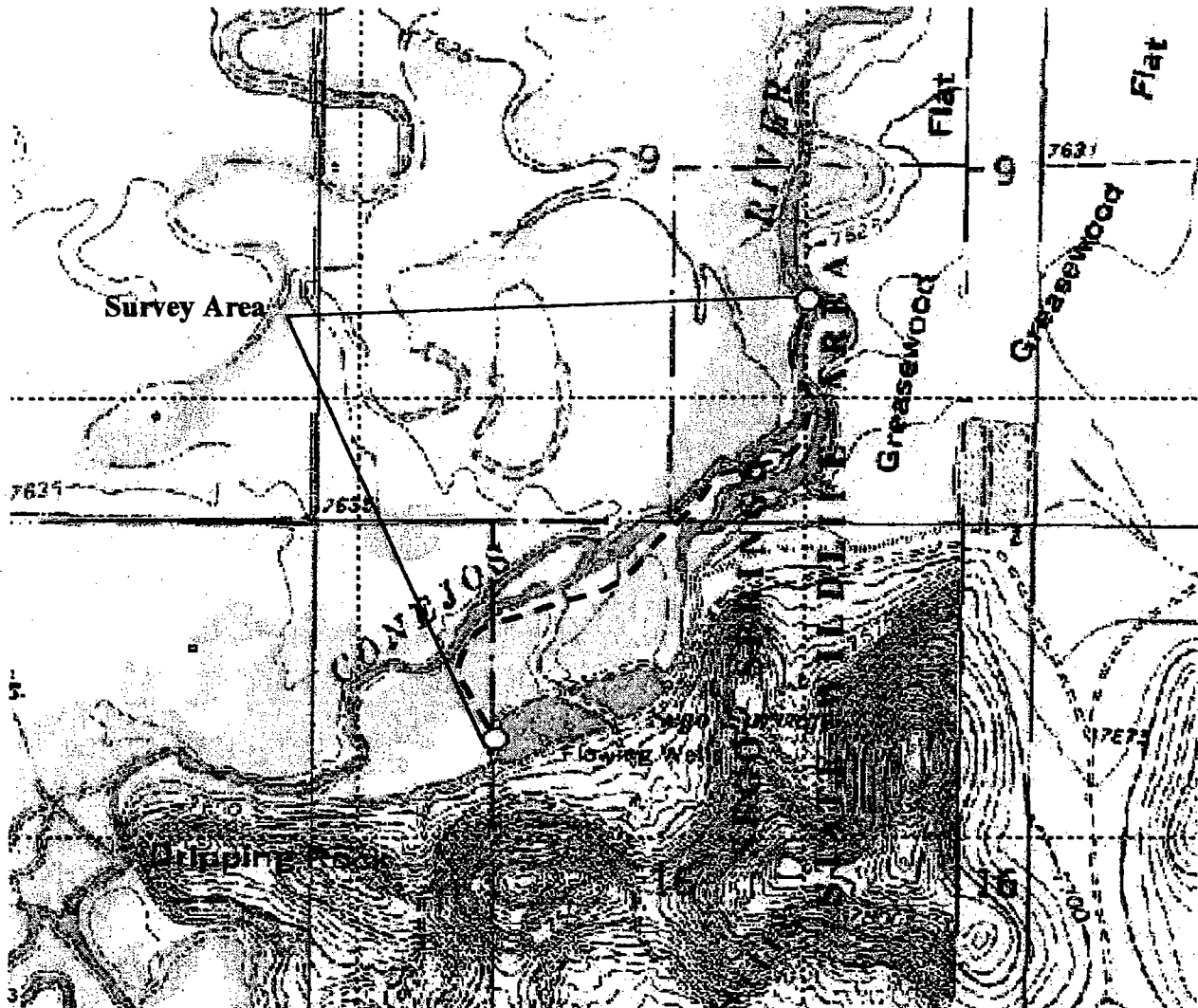


**Photographs of Rio Grande State Wildlife Area Southwestern Willow Flycatcher survey site.**

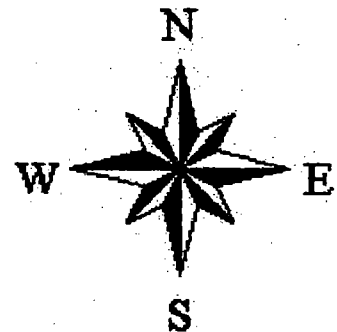
APPENDIX C, cont.

Sego Springs State Wildlife Area Southwestern Willow Flycatcher Survey Area

Manassa USGS 7.5' Quadrangle



- Survey Area Boundaries
- Survey Route



**APPENDIX C, cont.**



**Photograph of Sego Springs State Wildlife Area Southwestern Willow Flycatcher survey site.**

Willow Flycatcher Survey and Detection Form (rev. 4/97)

Site Name Alamosa National Wildlife Refuge <sup>South</sup> Was site surveyed in previous year? Yes ☒ No ☐  
If yes, what site name was used? NA

County Alamosa, Colorado State CO USGS Quad Name Alamosa East, Pikes Stockade, Laszuses

Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? ☒ Yes ☐ No  
Zone B3 N 443815 N 4134044  
Coordinates E 0428949 E 0433870 Lat Long / Township-Range (UTM) (circle one)  
Elevation 7500 (feet) meters (circle one)

**\*\* Fill in additional site information on back of this page \*\***

| Survey #<br>Observer(s)                 | Date (m/d/y)<br>Survey time   | Number<br>of WIFLs<br>Found | Estimated<br>Number<br>of Pairs | Estimated<br>Number of<br>Territories | Nest(s)<br>Found?<br>Y or N | Cowbirds<br>Detected?<br>Y or N | Comments about this survey (e.g., evidence of<br>pairs or breeding, number of nests, nest<br>contents, potential threats, cowbird<br>abundance, presence of livestock, etc.) |
|---|---|-----------------------------|---------------------------------|---------------------------------------|-----------------------------|---------------------------------|--|
| <u>K. Spenserson</u><br><u>R. Sims</u>  | date <u>5/23/02</u><br>start <u>6:00</u><br>stop <u>10:00</u><br>total hrs <u>4</u>     | <u>13</u>                   | <u>0</u>                        | <u>0</u>                              | <u>N</u>                    | <u>Y</u>                        | <u>4 WIFL seen &amp; heard.</u><br><u>It is possible one was</u><br><u>observed twice.</u>   |
| <u>K. Spenserson</u><br><u>K. Stone</u> | date <u>6/13/02</u><br>start <u>5:00</u><br>stop <u>9:40</u><br>total hrs <u>4:40</u>   | <u>16</u>                   | <u>?</u>                        | <u>?</u>                              | <u>N</u>                    | <u>Y</u>                        | <u>Observers could</u><br><u>not determine pair</u><br><u>or territory size</u><br><u>all WIFLs were singing</u><br><u>no obvious nesting</u><br><u>activity.</u>            |
| <u>K. Spenserson</u><br><u>W</u>        | date <u>6/27/02</u><br>start <u>5:15</u><br>stop <u>10:35</u><br>total hrs <u>5 1/4</u> | <u>19</u>                   | <u>3</u><br><u>(?)</u>          | <u>3</u><br><u>(?)</u>                | <u>N</u>                    | <u>Y</u>                        | <u>19 singing WIFLs seen.</u><br><u>singing male may be</u><br><u>a pair in three locations</u><br><u>no sure sign of nesting</u><br><u>behavior observed.</u>               |
| _____                                   | date _____<br>start _____<br>stop _____<br>total hrs _____                              |                             |                                 |                                       |                             |                                 |  |
| _____                                   | date _____<br>start _____<br>stop _____<br>total hrs _____                              |                             |                                 |                                       |                             |                                 |  |
| Overall Summary                         |   |                             |                                 |                                       |                             |                                 | Were any WIFLs color-banded? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>   |
| Total survey hrs <u>14</u>              |   |                             |                                 |                                       |                             |                                 | If yes, report color combination(s) in the<br>comments section on back of form   |

Name of Reporting Individual Karen R Spenserson Date Report Completed July 14, '02

Submit the original of this form. Retain a copy for your records.

Fill in the following information completely. Submit original form. Retain copy for your records.

Name of Reporting Individual Karen R Epperson Phone # 505-758-7035

Affiliation Hankes A/S/T, Inc. Email kepp@hankes.org

Site Name Alamosa

Did you verify that this site name is consistent with that used in previous years? Yes ☐ No ☒ (circle one)

Management Authority for Survey Area (circle one):

☒ Federal ☐ Municipal/County ☐ State ☐ Tribal ☐ Private

Name of Management Entity or Owner (e.g., Tonto National Forest)

US Game & Fish Alamosa National Wildlife Refuge

9 miles

Length of area surveyed: 9 miles (specify units, e.g., miles = mi, kilometers = km, meters = m)

Did you survey the same general area during each visit to this site this year? ☒ Yes ☐ No If no, summarize in comments below.  
If site was surveyed last year, did you survey the same general area this year? Yes / No If no, summarize in comments below.

Vegetation Characteristics: Overall, are the species in tree/shrub layer at this site comprised predominantly of (check one):

- ☒ Native broadleaf plants (entirely or almost entirely) ☐ Mixed native and exotic plants (mostly native)  
☐ Mixed native and exotic plants (mostly exotic) ☐ Exotic/introduced plants (entirely or almost entirely)

Identify the 2-3 predominant tree/shrub species: Willow, narrow-leaf cottonwood, elm

Average height of canopy: 9-10 ft. (specify units)

Is surface water or saturated soil present at or adjacent to site? ☒ Yes ☐ No (circle one)

Distance from the site to surface water or saturated soil: 20-50 ft. (specify units)

Do hydrological conditions change significantly among visits (did the site flood or dry out)? Yes ☐ No ☒ (circle one)  
If yes, describe in comments section below.

Remember to attach a xerox copy of a USGS quad/topographical map (REQUIRED) of the survey area, noting the survey site location of WIFL detections. You may also include a sketch or aerial photograph showing details of site location, patch size, survey route in relation to patch, and location of any willow flycatchers or willow flycatcher nests detected. Such sketches and photographs are welcomed, but DO NOT substitute for the required USGS quad map.

Comments (attach additional sheets if necessary): See attached.

Willow Flycatcher Survey and Detection Form (rev. 4/97)

Site Name Alamosa NWR North Was site surveyed in previous year? Yes ☐ No ☒  
If yes, what site name was used? NA

County Alamosa State CO USGS Quad Name Alamosa East

Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? ☒ Yes ☐ No  
Zone 13S N 4144084 N 4143815  
Coordinates E 0427386 E 0428949 Lat Long / Township-Range UTM (circle one)  
Elevation 75m feet / meters (circle one)

**\*\* Fill in additional site information on back of this page \*\***

| Survey #<br>Observer(s)       | Date (m/d/y)<br>Survey time  | Number<br>of WIFLs<br>Found | Estimated<br>Number<br>of Pairs | Estimated<br>Number of<br>Territories | Nest(s)<br>Found?<br>Y or N | Cowbirds<br>Detected?<br>Y or N | Comments about this survey (e.g., evidence of<br>pairs or breeding, number of nests, nest<br>contents, potential threats, cowbird<br>abundance, presence of livestock, etc.) |
|-------------------------------|--|-----------------------------|---------------------------------|---------------------------------------|-----------------------------|---------------------------------|--|
| <u>Kepperson</u>              | date <u>5/24/02</u><br>start <u>6:00</u><br>stop <u>8:45</u><br>total hrs <u>2 3/4</u> | <u>0</u>                    | <u>0</u>                        | <u>0</u>                              | <u>N</u>                    | <u>Y</u>                        | <u>Presence of livestock<br/>obvious - broken willows<br/>paths cut through stands</u>   |
| <u>Kepperson</u>              | date <u>6/14/02</u><br>start <u>5:30</u><br>stop <u>8:10</u><br>total hrs <u>2 2/3</u> | <u>3</u>                    | <u>?</u>                        | <u>3</u><br>(?)                       | <u>N</u>                    | <u>Y</u>                        |  |
| <u>Kepperson</u>              | date <u>6/28/02</u><br>start <u>5:15</u><br>stop <u>8:15</u><br>total hrs <u>3</u>     | <u>4</u>                    | <u>?</u>                        | <u>3</u><br>(?)                       | <u>N</u>                    | <u>Y</u>                        | <u>The 4th WIFL did not<br/>vocalize, did not perch<br/>but moved in and out<br/>of willows on near edge<br/>side of river</u>   |
|                               | date<br>start<br>stop<br>total hrs   |                             |                                 |                                       |                             |                                 |  |
|                               | date<br>start<br>stop<br>total hrs   |                             |                                 |                                       |                             |                                 |  |
| Overall Summary               |  |                             |                                 |                                       |                             |                                 | Were any WIFLs color-banded? Yes <input type="radio"/> No <input checked="" type="radio"/>   |
| Total survey hrs <u>8 1/4</u> |  |                             |                                 |                                       |                             |                                 | If yes, report color combination(s) in the<br>comments section on back of form   |

Name of Reporting Individual Yvonne Kepperson Date Report Completed Jun 14, '02

Fill in the following information completely. Submit original form. Retain copy for your records.

Name of Reporting Individual Karen R Epperson Phone # 505.758.7035

Affiliation Hanks Alot, Inc. Email kepp@laplaza.org

Site Name Alamosa NWIR North

Did you verify that this site name is consistent with that used in previous years? Yes (No) (circle one)

Management Authority for Survey Area (circle one): Federal Municipal/County State Tribal Private

Name of Management Entity or Owner (e.g., Tonto National Forest) Dept. Fish & Game Alamosa National Wildlife Refuge

Length of area surveyed: 1 mile (specify units, e.g., miles = mi, kilometers = km, meters = m)

Did you survey the same general area during each visit to this site this year? (Yes) No If no, summarize in comments below.  
If site was surveyed last year, did you survey the same general area this year? Yes / No If no, summarize in comments below.

Vegetation Characteristics: Overall, are the species in tree/shrub layer at this site comprised predominantly of (check one):

☒ Native broadleaf plants (entirely or almost entirely)

☐ Mixed native and exotic plants (mostly native)

☐ Mixed native and exotic plants (mostly exotic)

☐ Exotic/introduced plants (entirely or almost entirely)

Identify the 2-3 predominant tree/shrub species: Willows, Cottonwoods

Average height of canopy: 8-9 ft. (specify units)

Was surface water or saturated soil present at or adjacent to site? (Yes) No (circle one)

Distance from the site to surface water or saturated soil: 0-30 ft. (specify units)

Did hydrological conditions change significantly among visits (did the site flood or dry out)? Yes (No) (circle one)  
If yes, describe in comments section below.

Remember to attach a xerox copy of a USGS quad/topographical map (REQUIRED) of the survey area, noting the survey site and location of WIFL detections. You may also include a sketch or aerial photograph showing details of site location, patch shape, survey route in relation to patch, and location of any willow flycatchers or willow flycatcher nests detected. Such sketches or photographs are welcomed, but DO NOT substitute for the required USGS quad map.

Comments (attach additional sheets if necessary): 3/3 to 3/4 of this survey site is marginal habitat. The area on both sides of the river between the bridge and the maintenance building provided best willow habitat. That habitat is disturbed by livestock, willow growth is not thin line along old river channel, or are decedent and broken. Good willow stands exist on the non-survey side of the river. The western-most end of the survey site looks promising with willows and tall trees but yielded nothing this survey year.



Low Flycatcher Survey and Detection Form (7/4/98)

Site Name Bighorn Creek - Reach 2

If yes, what site name was used? NA

Was site surveyed in previous year? Yes ☐ No ☒

County Conejos

State CO

USGS Quad Name Fox Creek

Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? ☒ Yes ☐ No

Site Coordinates: Start N 40.98345 E 03.94203 UTM

Stop N 40.98672 E 03.93966 UTM

Elevation 2000

feet/meters (circle one)

Zone 13S

\*\* Fill in additional site information on back of this page \*\*

| Survey #<br>Observer(s)                             | Date (m/d/y)<br>Survey time   | Number<br>of WIFLs<br>Found | Estimated<br>Number<br>of Pairs | Estimated<br>Number of<br>Territories | Nest(s)<br>Found?<br>Y or N | Cowbirds<br>Detected?<br>Y or N   | Presence of<br>Livestock,<br>Recent sign<br>Y or N | Comments about this survey<br>(e.g., evidence of pairs or<br>breeding, number of nests, nest<br>contents or number of fledges<br>seen; potential threats) |
|---|---|-----------------------------|---------------------------------|---------------------------------------|-----------------------------|---|--|---|
| 1   | Date<br>start<br>stop<br>total hrs  |                             |                                 |                                       |                             |   |  | No survey during the first period   |
| 2 <u>GE</u>   | Date <u>6/11/02</u><br>Start <u>0745</u><br>Stop <u>0800</u><br>total hrs <u>14</u> | $\emptyset$                 | $\emptyset$                     | $\emptyset$                           | $\emptyset$                 | <u>N</u>  | <u>N</u>   |   |
| 3 <u>LA</u>   | Date <u>7/4/02</u><br>Start <u>0830</u><br>Stop <u>0845</u><br>total hrs <u>14</u>  | $\emptyset$                 | $\emptyset$                     | $\emptyset$                           | $\emptyset$                 | <u>N</u>  | <u>N</u>   |   |
|   | Date<br>start<br>stop<br>total hrs  |                             |                                 |                                       |                             |   |  |   |
|   | Date<br>start<br>stop<br>total hrs  |                             |                                 |                                       |                             |   |  |   |
| Overall Site Summary<br>(Total only resident WIFLs) |   | Adults                      | Pairs                           | Territories                           | Nests                       | Were any WIFLs color-banded? Yes No <u>NA</u>   |  |   |
| Total survey hrs <u>1/2</u>                         |   | $\emptyset$                 | $\emptyset$                     | $\emptyset$                           | $\emptyset$                 | If yes, report color combination(s) in the comments section on back of form <u>NA</u> |  |   |

Name of Reporting Individual Lynn Alterman

Date Report Completed 7/23/02

Submit the original of this form. Retain a copy for your records.

Fill in the following information completely. Submit original form. 1 in copy for your records.

Name of Reporting Individual LYNN A. Ixtemar

Phone # (505) 222-9452

Affiliation Harris Aloft, Inc.

Email laxtema@harrisaloft.com

Site Name Bighorn Creek - Reach 2

Did you verify that this site name is consistent with that used in previous years? (Yes) No (circle one)

Management Authority for Survey Area (circle one):

Federal Municipal/County State Tribal Private

Name of Management Entity or Owner (e.g., Tonto National Forest) Rio Grande National Forest

Length of area surveyed: 0.36 Km (specify units, e.g., miles = mi, kilometers = km, meters = m)

Did you survey the same general area during each visit to this site this year? (Yes) No If no, summarize in comments below.

If site was surveyed last year, did you survey the same general area this year? Yes / No If no, summarize in comments below.

NA

Vegetation Characteristics: Overall, are the species in tree/shrub layer at this site comprised predominantly of (check one):

☒ Native broadleaf plants

(entirely or almost entirely, includes high-elevation willow)

☐ Mixed native and exotic plants (mostly native)

☐ Mixed native and exotic plants (mostly exotic)

☐ Exotic/introduced plants (entirely or almost entirely)

Identify the 2-3 predominant tree/shrub species: Juniperus sp., Ribes sp., Ericameria sp. (Rabbitbrush)

Average height of canopy: 4m (specify units)

Was surface water or saturated soil present at or adjacent to site? Yes (No) (circle one)

Distance from the site to surface water or saturated soil: NA (specify units)

Did hydrological conditions change significantly among visits (did the site flood or dry out)? Yes (No) (circle one)

If yes, describe in comments section below.

Remember to attach a xerox copy of a USGS quad/topographical map (REQUIRED) of the survey area, noting the survey site and location of WIFL detections. You may also include a sketch or aerial photograph showing details of site location, patch shape, survey route in relation to patch, and location of any willow flycatchers or willow flycatcher nests detected. Such sketches or photographs are welcomed, but DO NOT substitute for the required USGS quad map.

Comments (attach additional sheets if necessary): No habitat suitable for Willow Flycatchers. Mostly juniper, rabbitbrush + ribes sp. Very few willows; no water.

This site was not surveyed during the first survey period.

Low Flycatcher Survey and Detection Form (4/98)

Site Name Bighorn Creek - Reach 3

If yes, what site name was used? NA

Was site surveyed in previous year? Yes ☐ No ☒

County Conejos

State CO

USGS Quad Name Fox Creek

Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? ☒ Yes ☐ No

Site Coordinates: Start N 4097647

E 0393776

UTM

Stop: N 4097331

E 0393698

UTM

Elevation 2595

feet/meters (circle one)

Zone 13S

**\*\* Fill in additional site information on back of this page \*\***

| Survey #<br>Observer(s)     | Date (m/d/y)<br>Survey time  | Number<br>of WIFLs<br>Found | Estimated<br>Number<br>of Pairs | Estimated<br>Number of<br>Territories | Nest(s)<br>Found?<br>Y or N | Cowbirds<br>Detected?<br>Y or N   | Presence of<br>Livestock,<br>Recent sign<br>Y or N | Comments about this survey<br>(e.g., evidence of pairs or<br>breeding, number of nests, nest<br>contents or number of fledges<br>seen; potential threats) |
|-----------------------------|--|-----------------------------|---------------------------------|---------------------------------------|-----------------------------|---|--|---|
| 1                           | Date<br>start<br>stop<br>total hrs   |                             |                                 |                                       |                             |   |  | No survey during<br>the first period.   |
| 2 <u>GE</u>                 | Date <u>6/11/02</u><br>Start <u>0800</u><br>Stop <u>0815</u><br>total hrs <u>1/4</u> | <u>0</u>                    | <u>0</u>                        | <u>0</u>                              | <u>0</u>                    | <u>N</u>  | <u>N</u>   |   |
| 3 <u>LA</u>                 | Date <u>7/4/02</u><br>Start <u>0700</u><br>Stop <u>0715</u><br>total hrs <u>1/4</u>  | <u>0</u>                    | <u>0</u>                        | <u>0</u>                              | <u>0</u>                    | <u>N</u>  | <u>N</u>   |   |
|                             | Date<br>start<br>stop<br>total hrs   |                             |                                 |                                       |                             |   |  |   |
|                             | Date<br>start<br>stop<br>total hrs   |                             |                                 |                                       |                             |   |  |   |
| Overall Site Summary        |  | Adults                      | Pairs                           | Territories                           | Nests                       | Were any WIFLs color-banded? Yes No <u>NA</u><br>If yes, report color combination(s) in the comments section on<br>back of form <u>NA</u> |  |   |
| Total only resident(WIFLs)  |  | <u>0</u>                    | <u>0</u>                        | <u>0</u>                              | <u>0</u>                    |   |  |   |
| Total survey hrs <u>1/2</u> |  |                             |                                 |                                       |                             |   |  |   |

Name of Reporting Individual Lynn Allerton

Date Report Completed 7/23/02

Submit the original of this form. Retain a copy for your records.

Fill in the following information completely. Submit original form. ( ) in copy for your records.

Name of Reporting Individual LUNA Alterman

Phone # (505) 822-7455

Affiliation Hawks Aloft, Inc.

Email lalterman@hawksaloft.org

Site Name Bighorn Creek - Reach 3

Did you verify that this site name is consistent with that used in previous years? (Yes) No (circle one)

Management Authority for Survey Area (circle one):

Federal Municipal/County State Tribal Private

Name of Management Entity or Owner (e.g., Tonto National Forest) Rio Grande National Forest

Length of area surveyed: 0.32 Km (specify units, e.g., miles = mi, kilometers = km, meters = m)

Did you survey the same general area during each visit to this site this year? (Yes) No If no, summarize in comments below:

If site was surveyed last year, did you survey the same general area this year? Yes / No If no, summarize in comments below.

NA

Vegetation Characteristics: Overall, are the species in tree/shrub layer at this site comprised predominantly of (check one):

☒ Native broadleaf plants

(entirely or almost entirely, includes high-elevation willow)

☐ Mixed native and exotic plants (mostly native)

☐ Mixed native and exotic plants (mostly exotic)

☐ Exotic/introduced plants (entirely or almost entirely)

Identify the 2-3 predominant tree/shrub species: Salix exigua, Populus angustifolia, Rabbitbrush (Ericameria

Average height of canopy: 2.5m (young willow) (specify units)

12m (mature trees)

Was surface water or saturated soil present at or adjacent to site? Yes (No) (circle one)

Distance from the site to surface water or saturated soil: NA (specify units)

Did hydrological conditions change significantly among visits (did the site flood or dry out)? Yes (No) (circle one)  
If yes, describe in comments section below.

Remember to attach a xerox copy of a USGS quad/topographical map (REQUIRED) of the survey area, noting the survey site and location of WIFL detections. You may also include a sketch or aerial photograph showing details of site location, patch shape, survey route in relation to patch, and location of any willow flycatchers or willow flycatcher nests detected. Such sketches or photographs are welcomed, but DO NOT substitute for the required USGS quad map.

Comments (attach additional sheets if necessary): No suitable habitat for Willow Flycatchers. The willow plants were very sparse and not very tall. Lots of rabbitbrush was in + along the bank of the creek. No water was present during the survey period.

This site was not surveyed during the first survey period.

Site Name Bighorn Creek - Reach 4  
 If yes, what site name was used? NA

Was site surveyed in previous year? Yes ☐ No ☒

County Conejos

State CO

USGS Quad Name Fox Creek

Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? ☒ Yes ☐ No

Site Coordinates: Start N 4097647 E 0393776 UTM

Stop: N 4097413 E 0393615 UTM

Elevation 2595 feet/meters (circle one) Zone 13S

**\*\* Fill in additional site information on back of this page \*\***

| Survey #<br>Observer(s)                             | Date (m/d/y)<br>Survey time  | Number<br>of WIFLs<br>Found | Estimated<br>Number<br>of Pairs | Estimated<br>Number of<br>Territories | Nest(s)<br>Found?<br>Y or N | Cowbirds<br>Detected?<br>Y or N   | Presence of<br>Livestock,<br>Recent sign<br>Y or N | Comments about this survey<br>(e.g., evidence of pairs or<br>breeding, number of nests, nest<br>contents or number of fledges<br>seen; potential threats) |
|---|--|-----------------------------|---------------------------------|---------------------------------------|-----------------------------|---|--|---|
| 1   | Date<br>start<br>stop<br>total hrs   |                             |                                 |                                       |                             |   |  | No survey during<br>the first period  |
| 2 <u>GE</u>   | Date <u>6/11/02</u><br>Start <u>0815</u><br>Stop <u>0830</u><br>total hrs <u>1/4</u> | <u>0</u>                    | <u>0</u>                        | <u>0</u>                              | <u>0</u>                    | <u>N</u>  | <u>N</u>   |   |
| 3 <u>LA</u>   | Date <u>7/4/02</u><br>Start <u>0715</u><br>Stop <u>0730</u><br>total hrs <u>1/4</u>  | <u>0</u>                    | <u>0</u>                        | <u>0</u>                              | <u>0</u>                    | <u>N</u>  | <u>N</u>   |   |
|   | Date<br>start<br>stop<br>total hrs   |                             |                                 |                                       |                             |   |  |   |
|   | Date<br>start<br>stop<br>total hrs   |                             |                                 |                                       |                             |   |  |   |
| Overall Site Summary<br>(Total only resident WIFLs) |  | Adults                      | Pairs                           | Territories                           | Nests                       | Were any WIFLs color-banded? Yes No <u>NA</u>   |  |   |
| Total survey hrs <u>1/2</u>                         |  | <u>0</u>                    | <u>0</u>                        | <u>0</u>                              | <u>0</u>                    | If yes, report color combination(s) in the comments section on back of form <u>NA</u> |  |   |

Name of Reporting Individual MANUEL GARCIA

Date Report Completed 7/23/02

Submit the original of this form. Retain a copy for your records.

Fill in the following information completely. Submit original form. main copy for your records.

Name of Reporting Individual

Lynn Alterman

Phone #

(505) 828-9455

Affiliation

How's Aloft, Inc.

Email

lalterman@howsaloft.org

Site Name

Big Horn Creek - Reach 4

Did you verify that this site name is consistent with that used in previous years? Yes No (circle one)

Management Authority for Survey Area (circle one):

Federal

Municipal/County

State

Tribal

Private

Name of Management Entity or Owner (e.g., Tonto National Forest)

Kio Grande National Forest

Length of area surveyed: 0.28 Km (specify units, e.g., miles = mi, kilometers = km, meters = m)

Did you survey the same general area during each visit to this site this year? Yes No (circle one) If no, summarize in comments below.

If site was surveyed last year, did you survey the same general area this year? Yes / No If no, summarize in comments below.

NA

Vegetation Characteristics: Overall, are the species in tree/shrub layer at this site comprised predominantly of (check one):

☒ Native broadleaf plants

(entirely or almost entirely, includes high-elevation willow)

☐ Mixed native and exotic plants (mostly native)

☐ Mixed native and exotic plants (mostly exotic)

☐ Exotic/introduced plants (entirely or almost entirely)

Identify the 2-3 predominant tree/shrub species: Salix exigua, Populus angustifolia

Average height of canopy: 3m (specify units)

Was surface water or saturated soil present at or adjacent to site? Yes No (circle one)

Distance from the site to surface water or saturated soil: NA (specify units)

Did hydrological conditions change significantly among visits (did the site flood or dry out)? Yes No (circle one)

If yes, describe in comments section below.

Remember to attach a xerox copy of a USGS quad/topographical map (REQUIRED) of the survey area, noting the survey site and location of WIFL detections. You may also include a sketch or aerial photograph showing details of site location, patch shape, survey site in relation to patch, and location of any willow flycatchers or willow flycatcher nests detected. Such sketches or photographs are welcomed, but DO NOT substitute for the required USGS quad map.

Comments (attach additional sheets if necessary): No suitable habitat for Willow Flycatchers at this site. A few sparse patches of willow plants are present. No water was present at this site. Most of the Creek bed is lined with grasses.

This site was not surveyed during the first survey period.

Site Name The Canyon Reach 2 Was site surveyed in previous year? Yes ☐ No ☒  
 If yes, what site name was used? NA

County Conejos State CO USGS Quad Name Greenie Mountain

Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? ☒ Yes ☐ No  
 Site Coordinates: Start: N 4138188 E 0388692 UTM  
 Stop: N 4128059 E 0388196 UTM Zone 13S  
 Elevation 2590 feet/meters (circle one)

**\*\* Fill in additional site information on back of this page \*\***

| Survey #<br>Observer(s)                             | Date (m/d/y)<br>Survey time  | Number<br>of WIFLs<br>Found | Estimated<br>Number<br>of Pairs | Estimated<br>Number of<br>Territories | Nest(s)<br>Found?<br>Y or N | Cowbirds<br>Detected?<br>Y or N   | Presence of<br>Livestock,<br>Recent sign<br>Y or N | Comments about this survey<br>(e.g., evidence of pairs or<br>breeding, number of nests, nest<br>contents or number of fledges<br>seen; potential threats) |
|---|--|-----------------------------|---------------------------------|---------------------------------------|-----------------------------|---|--|---|
| 1<br>_____<br>_____<br>_____                        | Date<br>start<br>stop<br>total hrs _____   |                             |                                 |                                       |                             |   |  | Not surveyed<br>during the first<br>period.   |
| 2 <u>RS</u><br>_____<br>_____                       | Date <u>6/8</u><br>Start <u>0530</u><br>Stop <u>0545</u><br>total hrs <u>1/4</u> | $\emptyset$                 | $\emptyset$                     | $\emptyset$                           | N                           | N   | N  |   |
| 3 <u>GE</u><br>_____<br>_____                       | Date <u>7-4</u><br>Start <u>0900</u><br>Stop <u>0915</u><br>total hrs <u>1/4</u> | 0                           | 0                               | 0                                     | N                           | N   | N  | almost no<br>Habitat<br>played tape<br>ONCE   |
| _____<br>_____<br>_____                             | Date<br>start<br>stop<br>total hrs _____   |                             |                                 |                                       |                             |   |  |   |
| _____<br>_____<br>_____                             | Date<br>start<br>stop<br>total hrs _____   |                             |                                 |                                       |                             |   |  |   |
| Overall Site Summary<br>(Total only resident WIFLs) |  | Adults                      | Pairs                           | Territories                           | Nests                       | Were any WIFLs color-banded? Yes No <u>NA</u>   |  |   |
| Total survey hrs <u>1/2</u>                         |  | $\emptyset$                 | $\emptyset$                     | $\emptyset$                           | $\emptyset$                 | If yes, report color combination(s) in the comments section on back of form <u>NA</u> |  |   |

Name of Reporting Individual LYNN Altman Date Report Completed 7/23/00

Submit the original of this form. Retain a copy for your records.

Fill in the following information completely. Submit original form, retain copy for your records.

Name of Reporting Individual LYNN Alterman

Phone # (515) 828-9415

Affiliation Hawks Aloft, Inc.

Email lalterman@hawksaloft.!

Site Name The Canyon Reach 2

Did you verify that this site name is consistent with that used in previous years? Yes ☒ No (circle one)

Management Authority for Survey Area (circle one):

Federal Municipal/County State Tribal Private

Name of Management Entity or Owner (e.g., Tonto National Forest) Rio Grande

Length of area surveyed: 0.5 km (specify units, e.g., miles = mi, kilometers = km, meters = m)

Did you survey the same general area during each visit to this site this year? Yes ☒ No If no, summarize in comments below.

If site was surveyed last year, did you survey the same general area this year? Yes / No If no, summarize in comments below.

Vegetation Characteristics: Overall, are the species in tree/shrub layer at this site comprised predominantly of (check one):

☒ Native broadleaf plants  
(entirely or almost entirely, includes high-elevation willow)

☐ Mixed native and exotic plants (mostly native)

☐ Mixed native and exotic plants (mostly exotic)

☐ Exotic/introduced plants (entirely or almost entirely)

Identify the 2-3 predominant tree/shrub species: Sage spp, Coyote Willow (Salix exigua)

Average height of canopy: 3 m (specify units)

Was surface water or saturated soil present at or adjacent to site? Yes ☒ No (circle one)

Distance from the site to surface water or saturated soil: N/A (specify units)

Did hydrological conditions change significantly among visits (did the site flood or dry out)? Yes ☒ No (circle one)

If yes, describe in comments section below.

Remember to attach a xerox copy of a USGS quad/topographical map (REQUIRED) of the survey area, noting the survey site and location of WIFL detections. You may also include a sketch or aerial photograph showing details of site location, patch shape, survey route in relation to patch, and location of any willow flycatchers or willow flycatcher nests detected. Such sketches or photographs are welcomed, but DO NOT substitute for the required USGS quad map.

Comments (attach additional sheets if necessary):



Site Name Tributary to The Canyon Reach 1  
 If yes, what site name was used? NA Was site surveyed in previous year? Yes ☐ No ☒

County Conejos State CO USGS Quad Name Greenie Mountain

Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? ☒ Yes ☐ No  
 Site Coordinates: Start N 4137892 E 0387899 UTM  
 Stop: N 4137484 E 0387887 UTM  
 Elevation 2500 feet/meters (circle one) Zone 13S

\*\* Fill in additional site information on back of this page \*\*

| Survey #<br>Observer(s)                               | Date (m/d/y)<br>Survey time  | Number<br>of WIFLs<br>Found | Estimated<br>Number<br>of Pairs | Estimated<br>Number of<br>Territories | Nest(s)<br>Found?<br>Y or N  | Cowbirds<br>Detected?<br>Y or N | Presence of<br>Livestock,<br>Recent sign<br>Y or N | Comments about this survey<br>(e.g., evidence of pairs or<br>breeding, number of nests, nest<br>contents or number of fledges<br>seen; potential threats) |
|---|--|-----------------------------|---------------------------------|---------------------------------------|--|---------------------------------|--|---|
| 1<br>_____<br>_____<br>_____<br>total hrs _____       | Date<br>start<br>stop<br>total hrs _____   |                             |                                 |                                       |  |                                 |  | Not surveyed during the first period.   |
| 2 <u>RS</u><br>_____<br>_____<br>total hrs <u>1/4</u> | Date <u>6/8</u><br>Start <u>0545</u><br>Stop <u>0600</u><br>total hrs <u>1/4</u> | <u>0</u>                    | <u>0</u>                        | <u>0</u>                              | <u>N</u>   | <u>N</u>                        | <u>N</u>   |   |
| 3 <u>GE</u><br>_____<br>_____<br>total hrs <u>1/4</u> | Date <u>7-4</u><br>Start <u>0915</u><br>Stop <u>0930</u><br>total hrs <u>1/4</u> | <u>0</u>                    | <u>0</u>                        | <u>0</u>                              | <u>N</u>   | <u>N</u>                        | <u>N</u>   | almost no Habitat<br>Played tape once   |
| _____<br>_____<br>_____<br>total hrs _____            | Date<br>start<br>stop<br>total hrs _____   |                             |                                 |                                       |  |                                 |  |   |
| _____<br>_____<br>_____<br>total hrs _____            | Date<br>start<br>stop<br>total hrs _____   |                             |                                 |                                       |  |                                 |  |   |
| Overall Site Summary<br>(Total only resident WIFLs)   | Adults   | Pairs                       | Territories                     | Nests                                 | Were any WIFLs color-banded? Yes No <u>NA</u><br>If yes, report color combination(s) in the comments section on back of form <u>NA</u> |                                 |  |   |
| Total survey hrs <u>1/2</u>                           | <u>0</u>   | <u>0</u>                    | <u>0</u>                        | <u>0</u>                              |  |                                 |  |   |

Name of Reporting Individual Lynn Altkemper Date Report Completed 7/23/02

Submit the original of this form. Retain a copy for your records.

Fill in the following information completely. Submit original form. Retain copy for your records.

Name of Reporting Individual Lynn Altermann

Phone # (505) 888-9455

Affiliation Hawks Aloft, Inc.

Email lalterman

Site Name Tributary to The Cañon

Did you verify that this site name is consistent with that used in previous years? Yes ☒ No ☐ (circle one)

Management Authority for Survey Area (circle one):

☒ Federal ☐ Municipal/County ☐ State ☐ Tribal ☐ Private

Name of Management Entity or Owner (e.g., Tonto National Forest) Rio Grande National Forest

Length of area surveyed: 0.4 km  
(specify units, e.g., miles = mi, kilometers = km, meters = m)

Did you survey the same general area during each visit to this site this year? Yes ☒ No ☐ If no, summarize in comments below.

If site was surveyed last year, did you survey the same general area this year? Yes / No If no, summarize in comments below.

NA

Vegetation Characteristics: Overall, are the species in tree/shrub layer at this site comprised predominantly of (check one):

☒ Native broadleaf plants

(entirely or almost entirely, includes high-elevation willow)

☐ Mixed native and exotic plants (mostly native)

☐ Mixed native and exotic plants (mostly exotic)

☐ Exotic/introduced plants (entirely or almost entirely)

Identify the 2-3 predominant tree/shrub species: Salix exigua (Coyote Willow); Sage sp.

Average height of canopy: 2 m  
(specify units)

Was surface water or saturated soil present at or adjacent to site? Yes ☐ No ☒ (circle one)

Distance from the site to surface water or saturated soil: N/A  
(specify units)

Did hydrological conditions change significantly among visits (did the site flood or dry out)? Yes ☐ No ☒ (circle one)  
If yes, describe in comments section below.

Remember to attach a xerox copy of a USGS quad/topographical map (REQUIRED) of the survey area, noting the survey site and location of WIFL detections. You may also include a sketch or aerial photograph showing details of site location, patch shape, survey route in relation to patch, and location of any willow flycatchers or willow flycatcher nests detected. Such sketches or photographs are welcomed, but DO NOT substitute for the required USGS quad map.

Comments (attach additional sheets if necessary):

Site Name Cat Creek Reach 2  
 If yes, what site name was used? NA

Was site surveyed in previous year? Yes ☐ No ☒

County Conejos

State CO

USGS Quad Name Greenie W4N

Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? ☒ Yes ☐ No  
 Site Coordinates: Start: N 4138724 E 0388189 UTM  
 Stop: N 4139020 E 0387959 UTM  
 Elevation 2540 feet/meters (circle one) Zone 13S

**\*\* Fill in additional site information on back of this page \*\***

| Survey #<br>Observer(s)                             | Date (m/d/y)<br>Survey time   | Number<br>of WIFLs<br>Found | Estimated<br>Number<br>of Pairs | Estimated<br>Number of<br>Territories | Nest(s)<br>Found?<br>Y or N | Cowbirds<br>Detected?<br>Y or N  | Presence of<br>Livestock,<br>Recent sign<br>Y or N | Comments about this survey<br>(e.g., evidence of pairs or<br>breeding, number of nests, nest<br>contents or number of fledges<br>seen; potential threats) |
|---|---|-----------------------------|---------------------------------|---------------------------------------|-----------------------------|--|--|---|
| 1   | Date<br>start<br>stop<br>total hrs  |                             |                                 |                                       |                             |  |  | Not surveyed<br>during the first<br>period.   |
| 2 <u>RS</u>   | Date <u>6-8</u><br>Start <u>0730</u><br>Stop <u>1000</u><br>total hrs <u>2 1/2</u>  | <u>0</u>                    | <u>0</u>                        | <u>0</u>                              | <u>N</u>                    | <u>Y</u>   | <u>N</u>   | 2 birds whiting<br>but no Fitz-<br>Baw  |
| 3 <u>CE</u>   | Date <u>6-27</u><br>Start <u>6:00</u><br>Stop <u>7:30</u><br>total hrs <u>1 1/2</u> | <u>0</u>                    | <u>0</u>                        | <u>0</u>                              | <u>N</u>                    | <u>Y</u>   | <u>N</u>   |   |
|   | Date<br>start<br>stop<br>total hrs  |                             |                                 |                                       |                             |  |  |   |
|   | Date<br>start<br>stop<br>total hrs  |                             |                                 |                                       |                             |  |  |   |
| Overall Site Summary<br>(Total only resident WIFLs) |   | Adults                      | Pairs                           | Territories                           | Nests                       | Were any WIFLs color-banded? Yes No <u>NA</u>  |  |   |
| Total survey hrs <u>4</u>                           |   | <u>0</u>                    | <u>0</u>                        | <u>0</u>                              | <u>0</u>                    | If yes, report color combination(s) in the comments section on<br>back of form <u>NA</u> |  |   |

Name of Reporting Individual Lynn Alterman

Date Report Completed 7/23/02

Submit the original of this form. Retain a copy for your records.

Fill in the following information completely. Submit original form. ☒ Main copy for your records.

Reporting Individual Luigi Altierman Phone # (503) 862-7455  
Affiliation Hawks Aloft, Inc Email laltierman@hawksaloft.com

Site Name Cat Creek - Reach 2

Did you verify that this site name is consistent with that used in previous years? ☒ Yes ☐ No (circle one)

Management Authority for Survey Area (circle one): ☒ Federal ☐ Municipal/County ☐ State ☐ Tribal ☐ Private

Name of Management Entity or Owner (e.g., Tonto National Forest) Rio Grande National Forest

Length of area surveyed: 1.1 Km (specify units, e.g., miles = mi, kilometers = km, meters = m)

Did you survey the same general area during each visit to this site this year? ☒ Yes ☐ No If no, summarize in comments below.

If site was surveyed last year, did you survey the same general area this year? Yes / ☒ No If no, summarize in comments below.

NA

Vegetation Characteristics: Overall, are the species in tree/shrub layer at this site comprised predominantly of (check one):

- ☒ Native broadleaf plants (entirely or almost entirely, includes high-elevation willow)  
☐ Mixed native and exotic plants (mostly exotic)  
☐ Mixed native and exotic plants (mostly native)  
☐ Exotic/introduced plants (entirely or almost entirely)

Identify the 2-3 predominant tree/shrub species: Salix exigua, Ericameria sp., Pinus ponderosa

Average height of canopy: 2 1/2 m (specify units)

Was surface water or saturated soil present at or adjacent to site? ☒ Yes ☐ No (circle one)

Distance from the site to surface water or saturated soil: pin (specify units)

Did hydrological conditions change significantly among visits (did the site flood or dry out)? ☒ Yes ☐ No (circle one)  
If yes, describe in comments section below. Water level depression.

Remember to attach a xerox copy of a USGS quad/topographical map (REQUIRED) of the survey area, noting the survey site and location of WIFL detections. You may also include a sketch or aerial photograph showing details of site location, patch shape, survey route in relation to patch, and location of any willow flycatchers or willow flycatcher nests detected. Such sketches or photographs are welcomed, but DO NOT substitute for the required USGS quad map.

Comments (attach additional sheets if necessary):

Same drying of season

This site was not surveyed during the first survey period.

Site Name Cat Creek Reach 4 Was site surveyed in previous year? Yes ☒ No ☐  
If yes, what site name was used? NA

County Conejos State CO USGS Quad Name Greenie Mountain

Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? ☒ Yes ☐ No

Site Coordinates: Start: N 4139210 E 0386810 UTM  
Stop: N 413378 E 0386334 UTM Zone 13S  
Elevation 2570 feet/meters (circle one)

**\*\* Fill in additional site information on back of this page \*\***

| Survey #<br>Observer(s)                             | Date (m/d/y)<br>Survey time  | Number<br>of WIFLs<br>Found | Estimated<br>Number<br>of Pairs | Estimated<br>Number of<br>Territories | Nest(s)<br>Found?<br>Y or N | Cowbirds<br>Detected?<br>Y or N  | Presence of<br>Livestock,<br>Recent sign<br>Y or N | Comments about this survey<br>(e.g., evidence of pairs or<br>breeding, number of nests, nest<br>contents or number of fledges<br>seen; potential threats) |
|---|--|-----------------------------|---------------------------------|---------------------------------------|-----------------------------|--|--|---|
| 1   | Date<br>start<br>stop<br>total hrs   |                             |                                 |                                       |                             |  |  | Not surveyed during the first period  |
| 2 <u>RS</u>   | Date <u>6/8</u><br>Start <u>0645</u><br>Stop <u>0715</u><br>total hrs <u>1/2</u> | <u>0</u>                    | <u>0</u>                        | <u>0</u>                              | <u>N</u>                    | <u>N</u>   | <u>N</u>   |   |
| 3 <u>GE</u>   | Date <u>7-4</u><br>Start <u>8:15</u><br>Stop <u>8:50</u><br>total hrs <u>1/2</u> | <u>0</u>                    | <u>0</u>                        | <u>0</u>                              | <u>N</u>                    | <u>N</u>   | <u>N</u>   | Very small site.  |
|   | Date<br>start<br>stop<br>total hrs   |                             |                                 |                                       |                             |  |  |   |
|   | Date<br>start<br>stop<br>total hrs   |                             |                                 |                                       |                             |  |  |   |
| Overall Site Summary<br>(Total only resident WIFLs) |  | Adults                      | Pairs                           | Territories                           | Nests                       | Were any WIFLs color-banded? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |  |   |
| Total survey hrs <u>1</u>                           |  | <u>0</u>                    | <u>0</u>                        | <u>0</u>                              | <u>0</u>                    | If yes, report color combination(s) in the comments section on back of form                      |  |   |

Name of Reporting Individual Lynn Alterman Date Report Completed 7/23/02

Fill in the following information completely. Submit original form. Retain copy for your records.

Name of Reporting Individual Lynn Alterman Phone # (505) 822-9455

Affiliation Hawks Aloft, Inc Email lalterman@hawksaloft.com

Site Name Cat Creek - Reach 4

Did you verify that this site name is consistent with that used in previous years? Yes No (circle one)

Management Authority for Survey Area (circle one): Federal Municipal/County State Tribal Private

Name of Management Entity or Owner (e.g., Tonto National Forest) Rio Grande National Forest

Length of area surveyed: 0.5 km (specify units, e.g., miles = mi, kilometers = km, meters = m)

Did you survey the same general area during each visit to this site this year? Yes / No If no, summarize in comments below.

If site was surveyed last year, did you survey the same general area this year? Yes / No If no, summarize in comments below.

Vegetation Characteristics: Overall, are the species in tree/shrub layer at this site comprised predominantly of (check one):

- ☒ Native broadleaf plants (entirely or almost entirely, includes high-elevation willow)  
☐ Mixed native and exotic plants (mostly native)  
☐ Mixed native and exotic plants (mostly exotic)  
☐ Exotic/introduced plants (entirely or almost entirely)

Identify the 2-3 predominant tree/shrub species: Salix exigua, Juniperus sp.

Average height of canopy: 4 m (specify units)

Was surface water or saturated soil present at or adjacent to site? Yes No (circle one)

Distance from the site to surface water or saturated soil: NA (specify units)

Did hydrological conditions change significantly among visits (did the site flood or dry out)? Yes No (circle one)  
If yes, describe in comments section below.

Remember to attach a xerox copy of a USGS quad/topographical map (REQUIRED) of the survey area, noting the survey site and location of WIFL detections. You may also include a sketch or aerial photograph showing details of site location, patch shape, survey route in relation to patch, and location of any willow flycatchers or willow flycatcher nests detected. Such sketches or photographs are welcomed, but DO NOT substitute for the required USGS quad map.

Comments (attach additional sheets if necessary): This site was not surveyed during the first survey period.

Site Name Conejos River - Reach 2 / Trail Gulch  
 If yes, what site name was used? NA Was site surveyed in previous year? Yes ☐ No ☒

County Conejos State CO USGS Quad Name Fox Creek

Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? ☒ Yes ☐ No  
 Site Coordinates: Start: N 4107373 E 0392010 UTM  
 Stop: N 4102503 E 0390547 UTM  
 Elevation 7555 feet/meters (circle one) Zone 13S

**\*\* Fill in additional site information on back of this page \*\***

| Survey #<br>Observer(s) | Date (m/d/y)<br>Survey time                                 | Number<br>of WIFLs<br>Found | Estimated<br>Number<br>of Pairs | Estimated<br>Number of<br>Territories | Nest(s)<br>Found?<br>Y or N | Cowbirds<br>Detected?<br>Y or N | Presence of<br>Livestock,<br>Recent sign<br>Y or N | Comments about this survey<br>(e.g., evidence of pairs or<br>breeding, number of nests, nest<br>contents or number of fledges<br>seen; potential threats) |
|-------------------------|---|-----------------------------|---------------------------------|---------------------------------------|-----------------------------|---------------------------------|--|---|
| <sup>1</sup> BJS        | Date 5/29/02<br>start 8:00<br>stop 9:45<br>total hrs 1 3/4  | 0                           | 0                               | 0                                     | N                           | Y                               | N  |   |
| <sup>2</sup> BJS        | Date 6/11/02<br>Start 7:30<br>Stop 10:00<br>total hrs 2 1/2 | 0                           | 0                               | 0                                     | N                           | Y                               | N  |   |
| <sup>3</sup> BJS        | Date 7/3/02<br>Start 6:00<br>Stop 8:15<br>total hrs 2 1/4   | 0                           | 0                               | 0                                     | N                           | Y                               | N  |   |
|                         | Date<br>start<br>stop<br>total hrs                          |                             |                                 |                                       |                             |                                 |  |   |
|                         | Date<br>start<br>stop<br>total hrs                          |                             |                                 |                                       |                             |                                 |  |   |

|   |          |          |             |          |   |
|---|----------|----------|-------------|----------|---|
| Overall Site Summary<br>(Total only resident WIFLs) | Adults   | Pairs    | Territories | Nests    | Were any WIFLs color-banded? Yes No <u>NA</u>   |
|   | <u>0</u> | <u>0</u> | <u>0</u>    | <u>0</u> | If yes, report color combination(s) in the comments section on back of form <u>NA</u> |
| Total survey hrs <u>6 1/2</u>                       |          |          |             |          |   |

Name of Reporting Individual Lynn Albrecht

Date Report Completed 7/23/02

Submit the original of this form. Retain a copy for your records.

Fill in the following information completely. Submit original form. Retain copy for your records.

Name of Reporting Individual Lynn Alterman

Phone # (607) 882-4400

Affiliation Hatch Alot Inc.

Email lalterman@hatchalot.com

Site Name Conejos River - Reach 2

Did you verify that this site name is consistent with that used in previous years? Yes No (circle one)

Management Authority for Survey Area (circle one):

Federal Municipal/County State Tribal Private

Name of Management Entity or Owner (e.g., Tonto National Forest) Rio Grande National Forest

Length of area surveyed: 1.7 Km (specify units, e.g., miles = mi, kilometers = km, meters = m)

Did you survey the same general area during each visit to this site this year? Yes No If no, summarize in comments below.

If site was surveyed last year, did you survey the same general area this year? Yes / No If no, summarize in comments below.

Vegetation Characteristics: Overall, are the species in tree/shrub layer at this site comprised predominantly of (check one):

☒ Native broadleaf plants  
(entirely or almost entirely, includes high-elevation willow)

☐ Mixed native and exotic plants (mostly native)

☐ Mixed native and exotic plants (mostly exotic)

☐ Exotic/introduced plants (entirely or almost entirely)

Identify the 2-3 predominant tree/shrub species: Populus angustifolia, Salix exigua

Average height of canopy: 6 m (specify units) Pinus ponderosa, Alnus incana

Was surface water or saturated soil present at or adjacent to site? Yes No (circle one)

Distance from the site to surface water or saturated soil: 0-30 m (specify units)

Did hydrological conditions change significantly among visits (did the site flood or dry out)? Yes No (circle one)

If yes, describe in comments section below.

Remember to attach a xerox copy of a USGS quad/topographical map (REQUIRED) of the survey area, noting the survey site and location of WIFL detections. You may also include a sketch or aerial photograph showing details of site location, patch shape, survey route in relation to patch, and location of any willow flycatchers or willow flycatcher nests detected. Such sketches or photographs are welcomed, but DO NOT substitute for the required USGS quad map.

Comments (attach additional sheets if necessary): The level of the Conejos River dropped significantly from the 1st survey period to the 2nd period.

Very little suitable habitat.



Site Name Conejos Redoubt

If yes, what site name was used? NA

Was site surveyed in previous year? Yes ☐ No ☒

County Conchos

State CO

USGS Quad Name 05ier

Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? ☒ Yes ☐ No

Site Coordinates: Start N 4103250 E 0387709 UTM

Stop: N 4103532 E 0386505 UTM

Elevation 2540 feet (meters (circle one))

Zone 13S

**\*\* Fill in additional site information on back of this page \*\***

| Survey #<br>Observer(s)                             | Date (m/d/y)<br>Survey time  | Number<br>of WIFLs<br>Found | Estimated<br>Number<br>of Pairs | Estimated<br>Number of<br>Territories | Nest(s)<br>Found?<br>Y or N | Cowbirds<br>Detected?<br>Y or N   | Presence of<br>Livestock,<br>Recent sign<br>Y or N | Comments about this survey<br>(e.g., evidence of pairs or<br>breeding, number of nests, nest<br>contents or number of fledges<br>seen; potential threats) |
|---|--|-----------------------------|---------------------------------|---------------------------------------|-----------------------------|---|--|---|
| 1 <u>BJS</u>  | Date <u>5/24/02</u><br>start <u>5:15</u><br>stop <u>8:15</u><br>total hrs <u>3</u>                               | 0                           | 0                               | 0                                     | N                           | Y   | N  |   |
| 2 <u>GE</u><br><u>BJS</u>                           | Date <u>6/11/02</u><br>Start <u>6:00</u><br>Stop <u>9:15</u><br>total hrs <u>3.25</u>                            | 0                           | 0                               | 0                                     | N                           | Y   | N  |   |
| 3 <u>GE</u><br><u>BJS</u>                           | Date <u>7/3/02</u><br>Start <u>8:30</u><br><u>8:00</u><br>Stop <u>9:30</u><br><u>10:00</u><br>total hrs <u>3</u> | 0                           | 0                               | 0                                     | N                           | Y   | N  |   |
|   | Date<br>start<br>stop<br>total hrs   |                             |                                 |                                       |                             |   |  |   |
|   | Date<br>start<br>stop<br>total hrs   |                             |                                 |                                       |                             |   |  |   |
| Overall Site Summary<br>(Total only resident WIFLs) |  | Adults                      | Pairs                           | Territories                           | Nests                       | Were any WIFLs color-banded? Yes No <u>NA</u>   |  |   |
| Total survey hrs <u>9 3/4</u>                       |  | 0                           | 0                               | 0                                     | N                           | If yes, report color combination(s) in the comments section on back of form <u>NA</u> |  |   |

Name of Reporting Individual Lynn Alterman

Date Report Completed 7/23/02

Submit the original of this form. Retain a copy for your records.

Fill in the following information completely. Submit original form. Keep copy for your records.

Name of Reporting Individual LYNN Alterman

Phone # (505) 828-9455

Affiliation Hawks Aloft

Email lalterman@hawksaloft.org

Site Name Conejos Reach 4

Did you verify that this site name is consistent with that used in previous years? Yes No (circle one)

Management Authority for Survey Area (circle one):

Federal Municipal/County State Tribal Private

Name of Management Entity or Owner (e.g., Tonto National Forest) Rio Grande National Forest

Length of area surveyed: 1.5 km (specify units, e.g., miles = mi, kilometers = km, meters = m)

Did you survey the same general area during each visit to this site this year? Yes No If no, summarize in comments below.

If site was surveyed last year, did you survey the same general area this year? Yes / No If no, summarize in comments below.

NA

Vegetation Characteristics: Overall, are the species in tree/shrub layer at this site comprised predominantly of (check one):

☒ Native broadleaf plants  
(entirely or almost entirely, includes high-elevation willow)

☐ Mixed native and exotic plants (mostly native)

☐ Mixed native and exotic plants (mostly exotic)

☐ Exotic/introduced plants (entirely or almost entirely)

Identify the 2-3 predominant tree/shrub species: Populus angustifolia, Salix exigua

Average height of canopy: 6 m (specify units) Pinus ponderosa

Was surface water or saturated soil present at or adjacent to site? Yes No (circle one)

Distance from the site to surface water or saturated soil: 0-30 m (specify units)

Did hydrological conditions change significantly among visits (did the site flood or dry out)? Yes No (circle one)  
If yes, describe in comments section below.

Remember to attach a xerox copy of a USGS quad/topographical map (REQUIRED) of the survey area, noting the survey site and location of WIFL detections. You may also include a sketch or aerial photograph showing details of site location, patch shape, survey route in relation to patch, and location of any willow flycatchers or willow flycatcher nests detected. Such sketches or photographs are welcomed, but DO NOT substitute for the required USGS quad map.

Comments (attach additional sheets if necessary): The Water level of the Conejos River dropped and the swampy areas all dried up by third period.  
Very little suitable habitat

Low Flycatcher Survey and Detection Form (4/98)

If yes, what site name was used?

Was site surveyed in previous year? Yes ☒ No ☐

County Conejos State CO USGS Quad Name Greenie Mountain

Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? ☒ Yes ☐ No

UTM

☒ Yes ☐ No

E 03.86.365

UTM

Zone : 135

feet / meters (circle one)

**\*\* Fill in additional site information on back of this page \*\***

| Survey #<br>Observer(s)                             | Date (m/d/y)<br>Survey time                          | Number<br>of WIFLs<br>Found | Estimated<br>Number<br>of Pairs | Estimated<br>Number of<br>Territories | Nest(s)<br>Found?<br>Y or N | Cowbirds<br>Detected?<br>Y or N  | Presence of<br>Livestock,<br>Recent sign<br>Y or N | Comments about this survey<br>(e.g., evidence of pairs or<br>breeding, number of nests, nest<br>contents or number of fledges<br>seen; potential threats) |
|---|--|-----------------------------|---------------------------------|---------------------------------------|-----------------------------|--|--|---|
| 1<br>_____<br>_____<br>_____                        | Date<br>start<br>stop<br>total hrs _____             |                             |                                 |                                       |                             |  |  | Not surveyed<br>during the<br>first period  |
| 2<br>RS<br>_____<br>_____                           | Date 6/8<br>Start 0630<br>Stop 0645<br>total hrs 1/4 | 0                           | 0                               | 0                                     | N                           | Y  | N  | No suitable<br>WIFL habitat   |
| 3<br>GE<br>_____<br>_____                           | Date 7-4<br>Start 8:00<br>Stop 8:15<br>total hrs 1/4 | 0                           | 0                               | 0                                     | N                           | N  | N  | Very small<br>site - not worth<br>climb around<br>private prop.   |
| _____<br>_____<br>_____                             | Date<br>start<br>stop<br>total hrs _____             |                             |                                 |                                       |                             |  |  |   |
| _____<br>_____<br>_____                             | Date<br>start<br>stop<br>total hrs _____             |                             |                                 |                                       |                             |  |  |   |
| Overall Site Summary<br>(Total only resident WIFLs) |  | Adults                      | Pairs                           | Territories                           | Nests                       | Were any WIFLs color-banded? Yes No NA   |  |   |
| Total survey hrs 1/2                                |  | 0                           | 0                               | 0                                     | 0                           | If yes, report color combination(s) in the comments section on<br>back of form<br>NA |  |   |

*Submit the original of this form. Retain a copy for your records.*

Fill in the following information completely. Submit original form. Retain copy for your records.

Name of Reporting Individual Lynn Altermann Phone # (505) 822-1425  
Affiliation Hawks Aloft, Inc. Email lalterman@hawksaloft.com

Site Name Deer Creek - Reach 2

Did you verify that this site name is consistent with that used in previous years? (Yes) No (circle one)

Management Authority for Survey Area (circle one): Federal Municipal/County State Tribal Private

Name of Management Entity or Owner (e.g., Tonto National Forest) Rio Grande National Forest

Length of area surveyed: 0.50 km (specify units, e.g., miles = mi, kilometers = km, meters = m)

Did you survey the same general area during each visit to this site this year? (Yes) No If no, summarize in comments below.

If site was surveyed last year, did you survey the same general area this year? Yes / No If no, summarize in comments below.

NA

Vegetation Characteristics: Overall, are the species in tree/shrub layer at this site comprised predominantly of (check one):

- ☒ Native broadleaf plants (entirely or almost entirely, includes high-elevation willow)  
☐ Mixed native and exotic plants (mostly native)  
☐ Mixed native and exotic plants (mostly exotic)  
☐ Exotic/introduced plants (entirely or almost entirely)

Identify the 2-3 predominant tree/shrub species: Salix exigua, Pinus edulis, Juniperus sp.

Average height of canopy: 3 m (specify units)

Was surface water or saturated soil present at or adjacent to site? Yes (No) (circle one)  
Distance from the site to surface water or saturated soil: NA (specify units)

Did hydrological conditions change significantly among visits (did the site flood or dry out)? Yes (No) (circle one)  
If yes, describe in comments section below.

Remember to attach a xerox copy of a USGS quad/topographical map (REQUIRED) of the survey area, noting the survey site and location of WIFL detections. You may also include a sketch or aerial photograph showing details of site location, patch shape, survey route in relation to patch, and location of any willow flycatchers or willow flycatcher nests detected. Such sketches or photographs are welcomed, but DO NOT substitute for the required USGS quad map.

Comments (attach additional sheets if necessary): This site was not surveyed during the first survey period.

Site Name Hot Creek Reach 3

Was site surveyed in previous year? Yes ☐ No ☒

If yes, what site name was used? NA

County Conejos

State CO

USGS Quad Name Terrace Reservoir

Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? ☒ Yes ☐ No

Site Coordinates: Start: N 412713 E 0388085 UTM

Stop: N 4129429 E 0387621 UTM

Zone 13S

Elevation 2550 feet (meters) (circle one)

**\*\* Fill in additional site information on back of this page \*\***

| Survey #<br>Observer(s)                             | Date (m/d/y)<br>Survey time                              | Number<br>of WIFLs<br>Found | Estimated<br>Number<br>of Pairs | Estimated<br>Number of<br>Territories | Nest(s)<br>Found?<br>Y or N | Cowbirds<br>Detected?<br>Y or N  | Presence of<br>Livestock,<br>Recent sign<br>Y or N | Comments about this survey<br>(e.g., evidence of pairs or<br>breeding, number of nests, nest<br>contents or number of fledges<br>seen; potential threats) |
|---|--|-----------------------------|---------------------------------|---------------------------------------|-----------------------------|--|--|---|
| 1   | Date<br>start<br>stop<br>total hrs                       |                             |                                 |                                       |                             |  |  | Not surveyed<br>during the first<br>period  |
| <sup>2</sup> BJS                                    | Date 6/10/02<br>Start 6:30<br>Stop 7:00<br>total hrs 1/2 | 0                           | 0                               | 0                                     | N                           | N  | N  | No<br>Suitable<br>Habitat   |
| <sup>3</sup> GE                                     | Date 6/26/02<br>Start 6:15<br>Stop 6:45<br>total hrs 1/2 | 0                           | 0                               | 0                                     | N                           | N  | N  |   |
|   | Date<br>start<br>stop<br>total hrs                       |                             |                                 |                                       |                             |  |  |   |
|   | Date<br>start<br>stop<br>total hrs                       |                             |                                 |                                       |                             |  |  |   |
| Overall Site Summary<br>(Total only resident WIFLs) |  | Adults                      | Pairs                           | Territories                           | Nests                       | Were any WIFLs color-banded? Yes No <u>NA</u>  |  |   |
| Total survey hrs <u>1 Hr</u>                        |  | 0                           | 0                               | 0                                     | 0                           | If yes, report color combination(s) in the comments section on<br>back of form <u>NA</u> |  |   |

Name of Reporting Individual Lynn Alterman

Date Report Completed 7/23/02

Submit the original of this form. Retain a copy for your records.

Fill in the following information completely. Submit original form. Retain copy for your records.

Name of Reporting Individual LYNN Alterman

Phone # (505) 828-9455

Affiliation Hawks Aloft Inc.

Email lalterman@hawkaloft.org

Site Name Hot Creek Reach 3

Did you verify that this site name is consistent with that used in previous years? (Yes) No (circle one)

Management Authority for Survey Area (circle one):

(Federal)

Municipal/County

State

Tribal

Private

Name of Management Entity or Owner (e.g., Tonto National Forest) Rio Grande Nat'l Forest

Length of area surveyed: 0.5 Km (specify units, e.g., miles = mi, kilometers = km, meters = m)

Did you survey the same general area during each visit to this site this year? (Yes) No If no, summarize in comments below.

If site was surveyed last year, did you survey the same general area this year? Yes / No If no, summarize in comments below.

NA

Vegetation Characteristics: Overall, are the species in tree/shrub layer at this site comprised predominantly of (check one):

☒ Native broadleaf plants

(entirely or almost entirely, includes high-elevation willow)

☐ Mixed native and exotic plants (mostly native)

☐ Mixed native and exotic plants (mostly exotic)

☐ Exotic/introduced plants (entirely or almost entirely)

Identify the 2-3 predominant tree/shrub species: Alnus incana, Populus tremuloides, Abies sp.

Average height of canopy: 7 m (specify units)

Was surface water or saturated soil present at or adjacent to site? (Yes) No (circle one)

Distance from the site to surface water or saturated soil: 0 m (specify units)

Did hydrological conditions change significantly among visits (did the site flood or dry out)? Yes (No) (circle one)  
If yes, describe in comments section below.

Remember to attach a xerox copy of a USGS quad/topographical map (REQUIRED) of the survey area, noting the survey site and location of WIFL detections. You may also include a sketch or aerial photograph showing details of site location, patch shape, survey route in relation to patch, and location of any willow flycatchers or willow flycatcher nests detected. Such sketches or photographs are welcomed, but DO NOT substitute for the required USGS quad map.

Comments (attach additional sheets if necessary): NO Flowing H<sub>2</sub>O, Some  
Stagnant Beaver ponds, Lots of Beaver activity  
visible. Very steep side canyon

This site was not surveyed during the first survey period.

Site Name Hot Creek Reach 4

If yes, what site name was used? NA

Was site surveyed in previous year? Yes ☐ No ☒

County Conejos

State CO

USGS Quad Name Terrace Reservoir

Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? ☒ Yes ☐ No

Site Coordinates: Start N 41281.29 E 0387624 UTM

Stop: N 4128355 E 0386960 UTM

Elevation 2580 feet/meters (circle one)

Zone 13S

\*\* Fill in additional site information on back of this page \*\*

| Survey #<br>Observer(s)                             | Date (m/d/y)<br>Survey time  | Number<br>of WIFLs<br>Found | Estimated<br>Number<br>of Pairs | Estimated<br>Number of<br>Territories | Nest(s)<br>Found?<br>Y or N | Cowbirds<br>Detected?<br>Y or N   | Presence of<br>Livestock,<br>Recent sign<br>Y or N | Comments about this survey<br>(e.g., evidence of pairs or<br>breeding, number of nests, nest<br>contents or number of fledges<br>seen; potential threats) |
|---|--|-----------------------------|---------------------------------|---------------------------------------|-----------------------------|---|--|---|
| 1<br>_____<br>_____<br>_____                        | Date<br>start<br>stop<br>total hrs _____   |                             |                                 |                                       |                             |   |  | Not surveyed<br>during the first<br>period  |
| 2 <u>BJS</u><br>_____<br>_____                      | Date <u>6/10/02</u><br>Start <u>7:00</u><br>Stop <u>7:30</u><br>total hrs <u>1/2</u> | <u>0</u>                    | <u>0</u>                        | <u>0</u>                              | <u>N</u>                    | <u>N</u>  | <u>N</u>   | NO<br>Suitable<br>Habitat   |
| 3 <u>GE</u><br>_____<br>_____                       | Date <u>6/26/02</u><br>Start <u>6:45</u><br>Stop <u>7:15</u><br>total hrs <u>1/2</u> | <u>0</u>                    | <u>0</u>                        | <u>0</u>                              | <u>N</u>                    | <u>N</u>  | <u>N</u>   |   |
| _____<br>_____<br>_____                             | Date<br>start<br>stop<br>total hrs _____   |                             |                                 |                                       |                             |   |  |   |
| _____<br>_____<br>_____                             | Date<br>start<br>stop<br>total hrs _____   |                             |                                 |                                       |                             |   |  |   |
| Overall Site Summary<br>(Total only resident WIFLs) |  | Adults                      | Pairs                           | Territories                           | Nests                       | Were any WIFLs color-banded? Yes No <u>NA</u><br>If yes, report color combination(s) in the comments section on<br>back of form <u>NA</u> |  |   |
| Total survey hrs <u>1 Hr</u>                        |  | <u>0</u>                    | <u>0</u>                        | <u>0</u>                              | <u>0</u>                    |   |  |   |

Name of Reporting Individual Lynn Alterman

Date Report Completed 7/23/02

Submit the original of this form. Retain a copy for your records.

Fill in the following information completely. Submit original form. Retain copy for your records.

Name of Reporting Individual LYNN Alterman

Phone # (505) 828-9455

Affiliation Hawks Aloft Inc

Email lalterman@hawksaloft.org

Site Name Hot Creek Reach 4

Did you verify that this site name is consistent with that used in previous years? (Yes) No (circle one)

Management Authority for Survey Area (circle one):

Federal Municipal/County State Tribal Private

Name of Management Entity or Owner (e.g., Tonto National Forest) Rio Grande National Forest

Length of area surveyed: 0.7 Km (specify units, e.g., miles = mi, kilometers = km, meters = m)

Did you survey the same general area during each visit to this site this year? (Yes) No If no, summarize in comments below.

If site was surveyed last year, did you survey the same general area this year? Yes / No If no, summarize in comments below.

NA

Vegetation Characteristics: Overall, are the species in tree/shrub layer at this site comprised predominantly of (check one):

☒ Native broadleaf plants

(entirely or almost entirely, includes high-elevation willow)

☐ Mixed native and exotic plants (mostly native)

☐ Mixed native and exotic plants (mostly exotic)

☐ Exotic/introduced plants (entirely or almost entirely)

Identify the 2-3 predominant tree/shrub species: Populus tremuloides, Alnus incana

Average height of canopy: 7 m (specify units)

Was surface water or saturated soil present at or adjacent to site? (Yes) No (circle one)

Distance from the site to surface water or saturated soil: 0 m (specify units)

Did hydrological conditions change significantly among visits (did the site flood or dry out)? Yes (No) (circle one)  
If yes, describe in comments section below.

Remember to attach a xerox copy of a USGS quad/topographical map (REQUIRED) of the survey area, noting the survey site and location of WIFL detections. You may also include a sketch or aerial photograph showing details of site location, patch shape, survey route in relation to patch, and location of any willow flycatchers or willow flycatcher nests detected. Such sketches or photographs are welcomed, but DO NOT substitute for the required USGS quad map.

Comments (attach additional sheets if necessary):

Small amount of water flowing in creek. Beaver activity present creating several small pools.

Steep sided canyon

This site was not surveyed during the first survey period.



Site Name Tributary to Hot Creek Reach 1 Was site surveyed in previous year? Yes ☐ No ☒  
 If yes, what site name was used? NA

County Conejos State CO USGS Quad Name Terrace Reservoir

Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? ☒ Yes ☐ No  
 Site Coordinates: Start: N 4127933 E 0388111 UTM  
 Stop: N 4127752 E 0387900 UTM Zone 13S  
 Elevation 2550m feet / meters (circle one)

**\*\* Fill in additional site information on back of this page \*\***

| Survey #<br>Observer(s)                             | Date (m/d/y)<br>Survey time  | Number<br>of WIFLs<br>Found | Estimated<br>Number<br>of Pairs | Estimated<br>Number of<br>Territories | Nest(s)<br>Found?<br>Y or N | Cowbirds<br>Detected?<br>Y or N  | Presence of<br>Livestock,<br>Recent sign<br>Y or N | Comments about this survey<br>(e.g., evidence of pairs or<br>breeding, number of nests, nest<br>contents or number of fledges<br>seen; potential threats) |
|---|--|-----------------------------|---------------------------------|---------------------------------------|-----------------------------|--|--|---|
| 1<br>_____<br>_____<br>_____                        | Date<br>start<br>stop<br>total hrs _____   |                             |                                 |                                       |                             |  |  | Not surveyed<br>during the first<br>period.   |
| <sup>2</sup> <u>BJS</u><br>_____<br>_____           | Date <u>6/10/02</u><br>Start <u>8:00</u><br>Stop <u>8:40</u><br>total hrs <u>3/4</u> | <u>0</u>                    | <u>0</u>                        | <u>0</u>                              | <u>N</u>                    | <u>Y</u>   | <u>N</u>   | NO Suitable<br>Habitat  |
| <sup>3</sup> <u>GE</u><br>_____<br>_____            | Date <u>6/24/02</u><br>Start <u>7:45</u><br>Stop <u>8:20</u><br>total hrs <u>1/2</u> | <u>0</u>                    | <u>0</u>                        | <u>0</u>                              | <u>N</u>                    | <u>Y</u>   | <u>N</u>   |   |
| _____<br>_____<br>_____                             | Date<br>start<br>stop<br>total hrs _____   |                             |                                 |                                       |                             |  |  |   |
| _____<br>_____<br>_____                             | Date<br>start<br>stop<br>total hrs _____   |                             |                                 |                                       |                             |  |  |   |
| Overall Site Summary<br>(Total only resident WIFLs) |  | Adults                      | Pairs                           | Territories                           | Nests                       | Were any WIFLs color-banded? Yes No <u>NA</u>  |  |   |
| Total survey hrs <u>1 1/4</u>                       |  | <u>0</u>                    | <u>0</u>                        | <u>0</u>                              | <u>0</u>                    | If yes, report color combination(s) in the comments section on<br>back of form <u>NA</u> |  |   |

Name of Reporting Individual Lynn Alterman Date Report Completed 7/23/02

Fill in the following information completely. Submit original form. Retain copy for your records.

Name of Reporting Individual LYNN Alterman Phone # (505) 828-9455  
Affiliation Hawks Aloft Inc. Email lalterman@hawksaloft.org

Site Name Tributary to Hot Creek Reach 1

Did you verify that this site name is consistent with that used in previous years? (Yes) No (circle one)

Management Authority for Survey Area (circle one): Federal Municipal/County State Tribal Private

Name of Management Entity or Owner (e.g., Tonto National Forest) Rio Grande Nat'l Forest

Length of area surveyed: 0.3 Km (specify units, e.g., miles = mi, kilometers = km, meters = m)

Did you survey the same general area during each visit to this site this year? (Yes) No If no, summarize in comments below.

If site was surveyed last year, did you survey the same general area this year? Yes / No If no, summarize in comments below.

NA

Vegetation Characteristics: Overall, are the species in tree/shrub layer at this site comprised predominantly of (check one):

- ☒ Native broadleaf plants (entirely or almost entirely, includes high-elevation willow)  
☐ Mixed native and exotic plants (mostly native)  
☐ Mixed native and exotic plants (mostly exotic)  
☐ Exotic/introduced plants (entirely or almost entirely)

Identify the 2-3 predominant tree/shrub species: Juniperus sp., Populus tremuloides

Average height of canopy: 6 m (specify units)

Was surface water or saturated soil present at or adjacent to site? Yes (No) (circle one)

Distance from the site to surface water or saturated soil: N/A (specify units)

Did hydrological conditions change significantly among visits (did the site flood or dry out)? Yes (No) (circle one)  
If yes, describe in comments section below.

Remember to attach a xerox copy of a USGS quad/topographical map (REQUIRED) of the survey area, noting the survey site and location of WIFL detections. You may also include a sketch or aerial photograph showing details of site location, patch shape, survey route in relation to patch, and location of any willow flycatchers or willow flycatcher nests detected. Such sketches or photographs are welcomed, but DO NOT substitute for the required USGS quad map.

Comments (attach additional sheets if necessary): NO Suitable Habitat  
to water present

IS site was not surveyed during the second survey period.

Low Flycatcher Survey and Detection Form (7/4/98)

Site Name Tributary to Hot Creek Reach 2 Was site surveyed in previous year? Yes ☐ No ☒  
 If yes, what site name was used? NA

County Conejos State CO USGS Quad Name Terrace Reservoir

Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? ☒ Yes ☐ No  
 Site Coordinates: Start: N 41.27721 E 0387873 UTM  
 Stop: N 4127845 E 0387621 UTM  
 Elevation 2575 feet (meters) (circle one) Zone 13S

**\*\* Fill in additional site information on back of this page \*\***

| Survey #<br>Observer(s) | Date (m/d/y)<br>Survey time  | Number<br>of WIFLs<br>Found | Estimated<br>Number<br>of Pairs | Estimated<br>Number of<br>Territories | Nest(s)<br>Found?<br>Y or N | Cowbirds<br>Detected?<br>Y or N | Presence of<br>Livestock,<br>Recent sign<br>Y or N | Comments about this survey<br>(e.g., evidence of pairs or<br>breeding, number of nests, nest<br>contents or number of fledges<br>seen; potential threats) |
|-------------------------|--|-----------------------------|---------------------------------|---------------------------------------|-----------------------------|---------------------------------|--|---|
| 1                       | Date<br>start<br>stop<br>total hrs   |                             |                                 |                                       |                             |                                 |  | Not surveyed during the first period.   |
| 2 <u>BJS</u>            | Date <u>6/10/02</u><br>Start <u>8:40</u><br>Stop <u>9:20</u><br>total hrs <u>3/4</u> | 0                           | 0                               | 0                                     | 0                           | N                               | N  | No Suitable Habitat   |
| 3 <u>GE</u>             | Date <u>6/26/02</u><br>Start <u>8:30</u><br>Stop <u>9:10</u><br>total hrs <u>3/4</u> | 0                           | 0                               | 0                                     | 0                           | N                               | N  |   |
|                         | Date<br>start<br>stop<br>total hrs   |                             |                                 |                                       |                             |                                 |  |   |
|                         | Date<br>start<br>stop<br>total hrs   |                             |                                 |                                       |                             |                                 |  |   |

|  |        |       |             |       |  |
|--|--------|-------|-------------|-------|--|
| Overall Site Summary<br>(Total only resident WIFLs)<br><br>Total survey hrs <u>1 1/2</u> | Adults | Pairs | Territories | Nests | Were any WIFLs color-banded? Yes No <u>NA</u><br>If yes, report color combination(s) in the comments section on back of form <u>NA</u> |
|  | 0      | 0     | 0           | 0     |  |

Name of Reporting Individual LYNN Alterman Date Report Completed 7/23/02

Submit the original of this form. Retain a copy for your records.

Fill in the following information completely. Submit original form. Retain copy for your records.

Name of Reporting Individual Lynn Alterman

Phone # (505) 828-9455

Affiliation Hawks Aloft Inc

Email lalterman@hawksaloft.org

Site Name Tributary to Hot Creek Reach 2

Did you verify that this site name is consistent with that used in previous years? Yes No (circle one)

Management Authority for Survey Area (circle one):

Federal

Municipal/County State Tribal Private

Name of Management Entity or Owner (e.g., Tonto National Forest) Rio Grande Nat'l Forest

Length of area surveyed: 0.3 Km (specify units, e.g., miles = mi, kilometers = km, meters = m)

Did you survey the same general area during each visit to this site this year? Yes / No If no, summarize in comments below.

If site was surveyed last year, did you survey the same general area this year? Yes / No If no, summarize in comments below.

NA

Vegetation Characteristics: Overall, are the species in tree/shrub layer at this site comprised predominantly of (check one):

☒ Native broadleaf plants

(entirely or almost entirely, includes high-elevation willow)

☐ Mixed native and exotic plants (mostly native)

☐ Mixed native and exotic plants (mostly exotic)

☐ Exotic/introduced plants (entirely or almost entirely)

Identify the 2-3 predominant tree/shrub species: Populus tremuloides, Juniperus sp., Ribes sp.

Average height of canopy: 7 m (specify units)

Was surface water or saturated soil present at or adjacent to site? Yes No (circle one)

Distance from the site to surface water or saturated soil: NA (specify units)

Did hydrological conditions change significantly among visits (did the site flood or dry out)? Yes No (circle one)  
If yes, describe in comments section below.

Remember to attach a xerox copy of a USGS quad/topographical map (REQUIRED) of the survey area, noting the survey site and location of WIFL detections. You may also include a sketch or aerial photograph showing details of site location, patch shape, survey route in relation to patch, and location of any willow flycatchers or willow flycatcher nests detected. Such sketches or photographs are welcomed, but DO NOT substitute for the required USGS quad map.

Comments (attach additional sheets if necessary): No Suitable Habitat present  
No water was ever present in creek

this site was not surveyed during the first survey period.

Site Name Tributary to Hot Creek Reach 3

If yes, what site name was used? NA

Was site surveyed in previous year? Yes ☐ No ☒

County Conejos

State CO

USGS Quad Name Terrace Reservoir

Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? ☒ Yes ☐ No

Site Coordinates: Start: N 412 7845 E 0387621 UTM

Stop: N 412 7520 E 0387598 UTM

Elevation 2575 feet / (meters) (circle one) Zone 13 S

**\*\* Fill in additional site information on back of this page \*\***

| Survey #<br>Observer(s)                             | Date (m/d/y)<br>Survey time  | Number<br>of WIFLs<br>Found | Estimated<br>Number<br>of Pairs | Estimated<br>Number of<br>Territories | Nest(s)<br>Found?<br>Y or N | Cowbirds<br>Detected?<br>Y or N   | Presence of<br>Livestock,<br>Recent sign<br>Y or N | Comments about this survey<br>(e.g., evidence of pairs or<br>breeding, number of nests, nest<br>contents or number of fledges<br>seen; potential threats) |
|---|--|-----------------------------|---------------------------------|---------------------------------------|-----------------------------|---|--|---|
| I<br>_____<br>_____<br>_____                        | Date<br>start<br>stop<br>total hrs _____   |                             |                                 |                                       |                             |   |  | Not surveyed<br>during the first<br>period.   |
| <sup>2</sup> BJS<br>_____<br>_____                  | Date <u>6/10/02</u><br>Start <u>9:30</u><br>Stop <u>9:45</u><br>total hrs <u>1/4</u> | <u>0</u>                    | <u>0</u>                        | <u>0</u>                              | <u>0</u>                    | <u>Y</u>  | <u>N</u>   | No Suitable<br>Habitat  |
| <sup>3</sup> G.E.<br>_____<br>_____                 | Date <u>6/26/02</u><br>Start <u>9:20</u><br>Stop <u>9:40</u><br>total hrs <u>1/4</u> | <u>0</u>                    | <u>0</u>                        | <u>0</u>                              | <u>0</u>                    | <u>Y</u>  | <u>N</u>   | No Suitable<br>Habitat  |
| _____<br>_____<br>_____                             | Date<br>start<br>stop<br>total hrs _____   |                             |                                 |                                       |                             |   |  |   |
| _____<br>_____<br>_____                             | Date<br>start<br>stop<br>total hrs _____   |                             |                                 |                                       |                             |   |  |   |
| Overall Site Summary<br>(Total only resident WIFLs) |  | Adults                      | Pairs                           | Territories                           | Nests                       | Were any WIFLs color-banded? Yes No <u>NA</u>   |  |   |
| Total survey hrs <u>1/2</u>                         |  | <u>0</u>                    | <u>0</u>                        | <u>0</u>                              | <u>0</u>                    | If yes, report color combination(s) in the comments section on back of form <u>NA</u> |  |   |

Name of Reporting Individual LYNN Alterman

Date Report Completed 7/23/02

Submit the original of this form. Retain a copy for your records.

Fill in the following information completely. Submit original form. Keep copy for your records.

Name of Reporting Individual

LYNN Alterman

Phone # (505) 828-9455

Affiliation

Hawks Aloft Inc.

Email lalterman@hawksaloft.

Site Name

Tributary to Hot Creek, Reach 3

Did you verify that this site name is consistent with that used in previous years? (Yes) No (circle one)

Management Authority for Survey Area (circle one):

Federal

Municipal/County

State

Tribal

Private

Name of Management Entity or Owner (e.g., Tonto National Forest)

Rio Grande National Forest

Length of area surveyed: 0.3 Km (specify units, e.g., miles = mi, kilometers = km, meters = m)

Did you survey the same general area during each visit to this site this year? (Yes) No If no, summarize in comments below.

If site was surveyed last year, did you survey the same general area this year? Yes / No If no, summarize in comments below.

NA

Vegetation Characteristics: Overall, are the species in tree/shrub layer at this site comprised predominantly of (check one):

☒ Native broadleaf plants

(entirely or almost entirely, includes high-elevation willow)

☐ Mixed native and exotic plants (mostly native)

☐ Mixed native and exotic plants (mostly exotic)

☐ Exotic/introduced plants (entirely or almost entirely)

Identify the 2-3 predominant tree/shrub species: Juniperus sp., Populus tremuloides, Pinus ponderosa

Average height of canopy: 8 m (specify units)

Was surface water or saturated soil present at or adjacent to site? Yes (No) (circle one)

Distance from the site to surface water or saturated soil: NA (specify units)

Did hydrological conditions change significantly among visits (did the site flood or dry out)? Yes (No) (circle one)

If yes, describe in comments section below.

Remember to attach a xerox copy of a USGS quad/topographical map (REQUIRED) of the survey area, noting the survey site and location of WIFL detections. You may also include a sketch or aerial photograph showing details of site location, patch shape, survey route in relation to patch, and location of any willow flycatchers or willow flycatcher nests detected. Such sketches or photographs are welcomed, but DO NOT substitute for the required USGS quad map.

Comments (attach additional sheets if necessary): NO Survegable Habitat  
NO water present

This site was not surveyed during the first survey period.

Site Name Ojito Creek, Reach 1

If yes, what site name was used? NA Was site surveyed in previous year? Yes ☐ No ☒

County Conejos State CO USGS Quad Name Terrace Reservoir Co

Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? ☒ Yes ☐ No

Site Coordinates: Start: N 4130962 E 0388004 UTM  
Stop: N 4131375 E 0388226 UTM  
Elevation 2600 feet/meters (circle one) Zone 13S

**\*\* Fill in additional site information on back of this page \*\***

| Survey #<br>Observer(s)                             | Date (m/d/y)<br>Survey time  | Number<br>of WIFLs<br>Found | Estimated<br>Number<br>of Pairs | Estimated<br>Number of<br>Territories | Nest(s)<br>Found?<br>Y or N | Cowbirds<br>Detected?<br>Y or N   | Presence of<br>Livestock,<br>Recent sign<br>Y or N | Comments about this survey<br>(e.g., evidence of pairs or<br>breeding, number of nests, nest<br>contents or number of fledges<br>seen; potential threats) |
|---|--|-----------------------------|---------------------------------|---------------------------------------|-----------------------------|---|--|---|
| 1   | Date _____<br>start _____<br>stop _____<br>total hrs _____                           |                             |                                 |                                       |                             |   |  | Not surveyed during the first period.   |
| 2 <u>RRS</u>  | Date <u>6/11/02</u><br>Start <u>0630</u><br>Stop <u>0730</u><br>total hrs <u>1</u>   | <u>0</u>                    | <u>0</u>                        | <u>0</u>                              | <u>N</u>                    | <u>Y</u>  | <u>N</u>   | A little potential habitat in back of survey area. No water in creek.   |
| 3 <u>GE</u>   | Date <u>6/27/02</u><br>Start <u>0800</u><br>Stop <u>0830</u><br>total hrs <u>0.5</u> | <u>0</u>                    | <u>0</u>                        | <u>0</u>                              | <u>N</u>                    | <u>Y</u>  | <u>N</u>   |   |
|   | Date _____<br>start _____<br>stop _____<br>total hrs _____                           |                             |                                 |                                       |                             |   |  |   |
|   | Date _____<br>start _____<br>stop _____<br>total hrs _____                           |                             |                                 |                                       |                             |   |  |   |
| Overall Site Summary<br>(Total only resident WIFLs) |  | Adults                      | Pairs                           | Territories                           | Nests                       | Were any WIFLs color-banded? Yes No <u>NA</u>   |  |   |
| Total survey hrs <u>1.5</u>                         |  | <u>0</u>                    | <u>0</u>                        | <u>0</u>                              | <u>0</u>                    | If yes, report color combination(s) in the comments section on back of form <u>NA</u> |  |   |

Name of Reporting Individual LYNN A. WOOD Date Report Completed 7/23/02

Submit the original of this form. Retain a copy for your records.

Fill in the following information completely. Submit original form. Retain copy for your records.

Name of Reporting Individual Rich Sim

Phone # (262) 367-8623

Affiliation Hawks Aloft, Inc.

Email rich-r-sim@yahoo.com

Site Name Ojito Creek

Did you verify that this site name is consistent with that used in previous years? Yes ☒ No ☐ (circle one)

Management Authority for Survey Area (circle one):

☒ Federal

☐ Municipal/County

☐ State

☐ Tribal

☐ Private

Name of Management Entity or Owner (e.g., Tonto National Forest)

Rio Grande Nat'l Forest

Length of area surveyed: 1 km (specify units, e.g., miles = mi, kilometers = km, meters = m)

Did you survey the same general area during each visit to this site this year? Yes ☒ No ☐ If no, summarize in comments below.

If site was surveyed last year, did you survey the same general area this year? Yes / No ☒ If no, summarize in comments below.

NA

Vegetation Characteristics: Overall, are the species in tree/shrub layer at this site comprised predominantly of (check one):

☒ Native broadleaf plants

(entirely or almost entirely, includes high-elevation willow)

☐ Mixed native and exotic plants (mostly native)

☐ Mixed native and exotic plants (mostly exotic)

☐ Exotic/introduced plants (entirely or almost entirely)

Identify the 2-3 predominant tree/shrub species: Baccharis tremuloides, Juniperus sp., Salix sp.

Average height of canopy: 10 m (specify units)

Was surface water or saturated soil present at or adjacent to site? Yes ☒ No ☐ (circle one)

Distance from the site to surface water or saturated soil: NA (specify units)  $\Rightarrow$  no water

Did hydrological conditions change significantly among visits (did the site flood or dry out)? Yes ☒ No ☐ (circle one)  
If yes, describe in comments section below.

Remember to attach a xerox copy of a USGS quad/topographical map (REQUIRED) of the survey area, noting the survey site and location of WIFL detections. You may also include a sketch or aerial photograph showing details of site location, patch shape, survey route in relation to patch, and location of any willow flycatchers or willow flycatcher nests detected. Such sketches or photographs are welcomed, but DO NOT substitute for the required USGS quad map.

Comments (attach additional sheets if necessary):

This site was not surveyed during the first survey period.



Site Name Rito Hondo - Reach 1

If yes, what site name was used? NA

Was site surveyed in previous year? Yes ☐ No ☒

County Conejos

State CO

USGS Quad Name Fox Creek

Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? ☒ Yes ☐ No

Site Coordinates: Start N 4698274

E 0393928

UTM

Stop: N 4098195

E 0393585

UTM

Elevation 2600

feet/meters (circle one)

Zone 13S

**\*\* Fill in additional site information on back of this page \*\***

| Survey #<br>Observer(s)                             | Date (m/d/y)<br>Survey time  | Number<br>of WIFLs<br>Found | Estimated<br>Number<br>of Pairs | Estimated<br>Number of<br>Territories | Nest(s)<br>Found?<br>Y or N | Cowbirds<br>Detected?<br>Y or N   | Presence of<br>Livestock,<br>Recent sign<br>Y or N | Comments about this survey<br>(e.g., evidence of pairs or<br>breeding, number of nests, nest<br>contents or number of fledges<br>seen; potential threats) |
|---|--|-----------------------------|---------------------------------|---------------------------------------|-----------------------------|---|--|---|
| 1   | Date<br>start<br>stop<br>total hrs   |                             |                                 |                                       |                             |   |  | Not surveyed<br>during the first<br>period.   |
| 2 <u>GE</u>   | Date <u>6/11/02</u><br>Start <u>0730</u><br>Stop <u>0745</u><br>total hrs <u>1/4</u> | <u>Ø</u>                    | <u>Ø</u>                        | <u>Ø</u>                              | <u>N</u>                    | <u>Y</u>  | <u>Y</u>   |   |
| 3 <u>GE</u>   | Date <u>7/23/02</u><br>Start <u>0800</u><br>Stop <u>0815</u><br>total hrs <u>1/4</u> | <u>Ø</u>                    | <u>Ø</u>                        | <u>Ø</u>                              | <u>N</u>                    | <u>Y</u>  | <u>Y</u>   |   |
|   | Date<br>start<br>stop<br>total hrs   |                             |                                 |                                       |                             |   |  |   |
|   | Date<br>start<br>stop<br>total hrs   |                             |                                 |                                       |                             |   |  |   |
| Overall Site Summary<br>(Total only resident WIFLs) |  | Adults                      | Pairs                           | Territories                           | Nests                       | Were any WIFLs color-banded? Yes No <u>NA</u>   |  |   |
| Total survey hrs <u>1/2</u>                         |  | <u>Ø</u>                    | <u>Ø</u>                        | <u>Ø</u>                              | <u>Ø</u>                    | If yes, report color combination(s) in the comments section on back of form <u>NA</u> |  |   |

Name of Reporting Individual LYNN Altermun

Date Report Completed 7/23/02

Submit the original of this form. Retain a copy for your records.

Submit original form. Keep copy for your records.

Name of Reporting Individual Lynn Alterman

Phone # (505) 822-9455

Affiliation Hawks Aloft, Inc.

Email lalterman@hawksaloft.org

Site Name Rito Hondo - Reach 1

Did you verify that this site name is consistent with that used in previous years? Yes No (circle one)

Management Authority for Survey Area (circle one):

Federal Municipal/County State Tribal Private

Name of Management Entity or Owner (e.g., Tonto National Forest) Rio Grande National Forest

Length of area surveyed: 0.30 km (specify units, e.g., miles = mi, kilometers = km, meters = m)

Did you survey the same general area during each visit to this site this year? Yes No If no, summarize in comments below.

If site was surveyed last year, did you survey the same general area this year? Yes / No If no, summarize in comments below.

Vegetation Characteristics: Overall, are the species in tree/shrub layer at this site comprised predominantly of (check one):

☒ Native broadleaf plants

(entirely or almost entirely, includes high-elevation willow)

☐ Mixed native and exotic plants (mostly native)

☐ Mixed native and exotic plants (mostly exotic)

☐ Exotic/introduced plants (entirely or almost entirely)

Identify the 2-3 predominant tree/shrub species: Juniperus sp., Populus angustifolia

Average height of canopy: 4 m (specify units)

Was surface water or saturated soil present at or adjacent to site? Yes No (circle one)

Distance from the site to surface water or saturated soil: 0 m (specify units)

Did hydrological conditions change significantly among visits (did the site flood or dry out)? Yes No (circle one)

If yes, describe in comments section below.

Remember to attach a xerox copy of a USGS quad/topographical map (REQUIRED) of the survey area, noting the survey site and location of WIFL detections. You may also include a sketch or aerial photograph showing details of site location, patch shape, survey route in relation to patch, and location of any willow flycatchers or willow flycatcher nests detected. Such sketches or photographs are welcomed, but DO NOT substitute for the required USGS quad map.

Comments (attach additional sheets if necessary): No suitable habitat for Willow Flycatchers in this reach. Mostly junipers with a few willows. Very little in creek (bed is lined with grasses).

This site was not surveyed during the first survey period.

Site Name Rito Hondo - Reach 2

If yes, what site name was used? NA Was site surveyed in previous year? Yes ☐ No ☒

County Conejos

State CO

USGS Quad Name Fox Creek

Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? ☒ Yes ☐ No

Site Coordinates: Start: N 4098195 E 0393685 UTM

Stop: N 4097916 E 0392038 UTM

Elevation 2500 feet/meters (circle one) Zone BS

**\*\* Fill in additional site information on back of this page \*\***

| Survey #<br>Observer(s)                             | Date (m/d/y)<br>Survey time  | Number<br>of WIFLs<br>Found | Estimated<br>Number<br>of Pairs | Estimated<br>Number of<br>Territories | Nest(s)<br>Found?<br>Y or N | Cowbirds<br>Detected?<br>Y or N  | Presence of<br>Livestock,<br>Recent sign<br>Y or N | Comments about this survey<br>(e.g., evidence of pairs or<br>breeding, number of nests, nest<br>contents or number of fledges<br>seen; potential threats) |
|---|--|-----------------------------|---------------------------------|---------------------------------------|-----------------------------|--|--|---|
| 1   | Date<br>start<br>stop<br>total hrs   |                             |                                 |                                       |                             |  |  | Not surveyed during the first period.   |
| 2 <u>GE</u>   | Date <u>6/11/02</u><br>Start <u>0530</u><br>Stop <u>0730</u><br>total hrs <u>2</u> | <u>Ø</u>                    | <u>Ø</u>                        | <u>Ø</u>                              | <u>N</u>                    | <u>Y</u>   | <u>Y</u>   |   |
| 3 <u>GE</u>   | Date <u>7/3/02</u><br>Start <u>0600</u><br>Stop <u>0800</u><br>total hrs <u>2</u>  | <u>Ø</u>                    | <u>Ø</u>                        | <u>Ø</u>                              | <u>N</u>                    | <u>Y</u>   | <u>Y</u>   |   |
|   | Date<br>start<br>stop<br>total hrs   |                             |                                 |                                       |                             |  |  |   |
|   | Date<br>start<br>stop<br>total hrs   |                             |                                 |                                       |                             |  |  |   |
| Overall Site Summary<br>(Total only resident WIFLs) |  | Adults                      | Pairs                           | Territories                           | Nests                       | Were any WIFLs color-banded? Yes No <u>NA</u>  |  |   |
| Total survey hrs <u>4</u>                           |  | <u>Ø</u>                    | <u>Ø</u>                        | <u>Ø</u>                              | <u>Ø</u>                    | If yes, report color combination(s) in the comments section on back of form: <u>NA</u> |  |   |

Name of Reporting Individual Lynn Alterman

Date Report Completed 7/23/02

Submit the original of this form. Retain a copy for your records.

Fill in the following information completely. Submit original form. Retain copy for your records.

Name of Reporting Individual LYNN Alterman

Phone # (505) 838-9455

Affiliation Hawks Alst. Inc.

Email l.alterman@hawksalst.com

Site Name Rito Hondo - Reach 2

Did you verify that this site name is consistent with that used in previous years? Yes ☐ No ☒ (circle one)

Management Authority for Survey Area (circle one):

☒ Federal ☐ Municipal/County ☐ State ☐ Tribal ☐ Private

Name of Management Entity or Owner (e.g., Tonto National Forest) Rio Grande National Forest

Length of area surveyed: 1.68 km (specify units, e.g., miles = mi, kilometers = km, meters = m)

Did you survey the same general area during each visit to this site this year? Yes ☒ No ☐ If no, summarize in comments below.

If site was surveyed last year, did you survey the same general area this year? Yes ☐ No ☐ If no, summarize in comments below.

Vegetation Characteristics: Overall, are the species in tree/shrub layer at this site comprised predominantly of (check one):

☒ Native broadleaf plants (entirely or almost entirely, includes high-elevation willow)

☐ Mixed native and exotic plants (mostly native)

☐ Mixed native and exotic plants (mostly exotic)

☐ Exotic/introduced plants (entirely or almost entirely)

Identify the 2-3 predominant tree/shrub species: Juniperus sp., Salix exigua, Populus angustifolia

Average height of canopy: 3m (specify units)

Was surface water or saturated soil present at or adjacent to site? Yes ☒ No ☐ (circle one)

Distance from the site to surface water or saturated soil: 0 m (specify units)

Did hydrological conditions change significantly among visits (did the site flood or dry out)? Yes ☐ No ☒ (circle one)  
If yes, describe in comments section below.

Remember to attach a xerox copy of a USGS quad/topographical map (REQUIRED) of the survey area, noting the survey site and location of WIFL detections. You may also include a sketch or aerial photograph showing details of site location, patch shape, survey route in relation to patch, and location of any willow flycatchers or willow flycatcher nests detected. Such sketches or photographs are welcomed, but DO NOT substitute for the required USGS quad map.

Comments (attach additional sheets if necessary): The lower portion of the reach contains primarily juniper and is not suitable habitat for willow flycatcher. Willows are present in some areas but not towards the middle of reach. On this reach, very little water is present.  
This site was not surveyed during the first survey period.

Willow Flycatcher Survey and Detection Form (rev. 4/98)

Site Name Higel State WL Area  
If yes, what site name was used? \_\_\_\_\_

Was site surveyed in previous year? Yes ☐ No ☒

County Alamosa

State CO

USGS Quad Name Mt Pleasant School 11/12

Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? ☒ Yes ☐ No  
Site Coordinates: Start: N 4157662 E 0411636 UTM  
Stop: N 4156529 E 0414161 UTM  
Elevation 2325 feet/meters (circle one) UTM Zone 13S

**\*\* Fill in additional site information on back of this page \*\***

| Survey #<br>Observer(s)                             | Date (m/d/y)<br>Survey time  | Number<br>of WIFLs<br>Found | Estimated<br>Number<br>of Pairs | Estimated<br>Number of<br>Territories | Nest(s)<br>Found?<br>Y or N | Cowbirds<br>Detected?<br>Y or N  | Presence of<br>Livestock,<br>Recent sign<br>Y or N | Comments about this survey<br>(e.g., evidence of pairs or<br>breeding, number of nests, nest<br>contents or number of fledges<br>seen; potential threats) |
|---|--|-----------------------------|---------------------------------|---------------------------------------|-----------------------------|--|--|---|
| 1 <u>Rich</u><br><u>Sim</u>                         | Date <u>5/26/02</u><br>start <u>6:30</u><br>stop <u>9:00</u><br>total hrs <u>2 1/2</u> | 0                           | 0                               | 0                                     | N                           | Y  | Y  | Only suitable<br>habitation in western<br>portion of site.<br>Thickest willow by<br>powerlines. No<br>leaves yet.   |
| 2 <u>RS</u>   | Date <u>6/4/02</u><br>Start <u>6:30</u><br>Stop <u>9:30</u><br>total hrs <u>3</u>      | 2                           | 0                               | 2                                     | N                           | Y  | Y  | all willows now<br>leafed out<br>more water on<br>west side of site<br>- near powerlines  |
| 3 <u>GE</u>   | Date <u>7-1</u><br>Start <u>6:15</u><br>Stop <u>10:00</u><br>total hrs <u>3 3/4</u>    | 1                           | 0                               | 1                                     | N                           | Y  | Y  |   |
| _____   | Date _____<br>start _____<br>stop _____<br>total hrs _____                             |                             |                                 |                                       |                             |  |  |   |
| _____   | Date _____<br>start _____<br>stop _____<br>total hrs _____                             |                             |                                 |                                       |                             |  |  |   |
| Overall Site Summary<br>(Total only resident WIFLs) |  | Adults                      | Pairs                           | Territories                           | Nests                       | Were any WIFLs color-banded? Yes <input type="radio"/> No <input checked="" type="radio"/> |  |   |
| Total survey hrs <u>9 1/4</u>                       |  | 1                           | 0                               | 1                                     | 0                           | If yes, report color combination(s) in the comments section on back of form                |  |   |

Name of Reporting Individual Lynn Alterman

Date Report Completed 7/23/02

Submit the original of this form. Retain a copy for your records.

Provide the following information completely. Submit original form. Retain copy for your records.

Reporting Individual Lynn Alterman

Phone # (505) 828-9455

Organization Hawks Aloft, Inc.

Email lalterman@hawksaloft.org

Site Name Hazel State Wildlife Area

Did you verify that this site name is consistent with that used in previous years? ☒ Yes ☐ No (circle one)

Management Authority for Survey Area (circle one):

Federal Municipal/County ☒ State ☐ Tribal ☐ Private

Name of Management Entity or Owner (e.g., Tonto National Forest): Colorado Division of Wildlife

Length of area surveyed: 2.8 Km (specify units, e.g., miles = mi, kilometers = km, meters = m)

Did you survey the same general area during each visit to this site this year? ☒ Yes ☐ No If no, summarize in comments below.

If site was surveyed last year, did you survey the same general area this year? Yes / No If no, summarize in comments below.

Vegetation Characteristics: Overall, are the species in tree/shrub layer at this site comprised predominantly of (check one):

☒ Native broadleaf plants

(entirely or almost entirely, includes high-elevation willow)

☐ Mixed native and exotic plants (mostly native)

☐ Mixed native and exotic plants (mostly exotic)

☐ Exotic/introduced plants (entirely or almost entirely)

Identify the 2-3 predominant tree/shrub species: Salix sp., Populus sp. (Cottonwood sp.)

Average height of canopy: 3 m (specify units)

Was surface water or saturated soil present at or adjacent to site? ☒ Yes ☐ No (circle one)

Distance from the site to surface water or saturated soil: 3 m (specify units)

Did hydrological conditions change significantly among visits (did the site flood or dry out)? ☒ Yes ☐ No (circle one)  
If yes, describe in comments section below.

Remember to attach a xerox copy of a USGS quad/topographical map (REQUIRED) of the survey area, noting the survey site and location of WIFL detections. You may also include a sketch or aerial photograph showing details of site location, patch shape, survey route in relation to patch, and location of any willow flycatchers or willow flycatcher nests detected. Such sketches or photographs are welcomed, but DO NOT substitute for the required USGS quad map.

Comments (attach additional sheets if necessary): Site dried out through season

4 pair of Black Terns were observed in this area. The pair displayed defensive behavior and may have had a nest in the area.

Willow Flycatcher Survey and Detection Form (rev. 4/98)

Site Name Hot Creek C.D.W.

If yes, what site name was used? NA

Was site surveyed in previous year? Yes ☒ No ☐

County Conejos

State CO

USGS Quad Name Centro and

Terra Reservoir

Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? ☒ Yes ☐ No

Site Coordinates: Start N 4125837 E 0394855 UTM

Stop: N 4128261 E 0399100 UTM

Elevation 2500 feet/meters (circle one) UTM Zone 13S

**\*\* Fill in additional site information on back of this page \*\***

| Survey #<br>Observer(s)                             | Date (m/d/y)<br>Survey time  | Number<br>of WIFLs<br>Found | Estimated<br>Number<br>of Pairs | Estimated<br>Number of<br>Territories | Nest(s)<br>Found?<br>Y or N | Cowbirds<br>Detected?<br>Y or N  | Presence of<br>Livestock,<br>Recent sign<br>Y or N | Comments about this survey<br>(e.g., evidence of pairs or<br>breeding, number of nests, nest<br>contents or number of fledges<br>seen; potential threats) |
|---|--|-----------------------------|---------------------------------|---------------------------------------|-----------------------------|--|--|---|
| 1 <u>GE</u><br><u>BJS</u>                           | Date <u>5-28-02</u><br>start <u>0600</u><br>stop <u>0930</u><br>total hrs <u>6 1/2</u>   | 2                           | 0                               | 2                                     | N                           | Y  | N  | 2 other birds<br>responded to tape<br>but did not fly - BJS<br>one gave a white only.<br>Both were GPS'd.   |
| 2 <u>BJS</u>  | Date <u>6/3/02</u><br>Start <u>6/5/02</u><br>Stop <u>1800</u><br>total hrs <u>13 1/2</u> | 6                           | 0                               | 6                                     | N                           | Y  | N  | 2 Birds again<br>responded to tape<br>only 1 white.<br>2 previous birds were<br>not relocated   |
| 3 <u>GE</u>   | Date <u>6/25/02</u><br>Start <u>0600</u><br>Stop <u>1000</u><br>total hrs <u>8</u>       | 2                           | 0                               | 2                                     | N                           | Y  | N  |   |
|   | Date<br>start<br>stop<br>total hrs   |                             |                                 |                                       |                             |  |  |   |
|   | Date<br>start<br>stop<br>total hrs   |                             |                                 |                                       |                             |  |  |   |
| Overall Site Summary<br>(Total only resident WIFLs) |  | Adults                      | Pairs                           | Territories                           | Nests                       | Were any WIFLs color-banded? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |  |   |
| Total survey hrs <u>28</u>                          |  | 2                           | 0                               | 2                                     | 0                           | If yes, report color combination(s) in the comments section on back of form                      |  |   |

Name of Reporting Individual LYNN Altman

Date Report Completed 7/23/02

Submit the original of this form. Retain a copy for your records.

Provide the following information completely. Submit original form. Retain copy for your records.

Name of Reporting Individual Lynn Alterman

Phone # (505) 838-7455

Affiliation Hawks Aloft Inc

Email lalterman@hawksaloft.org

Site Name Hot Creek State Wildlife Area

Did you verify that this site name is consistent with that used in previous years? Yes No (circle one)

Management Authority for Survey Area (circle one):

Federal Municipal/County State Tribal Private

Name of Management Entity or Owner (e.g., Tonto National Forest) Colorado Division of Wildlife

Length of area surveyed: 7.4 Km (specify units, e.g., miles = mi, kilometers = km, meters = m)

Did you survey the same general area during each visit to this site this year? Yes No If no, summarize in comments below.

If site was surveyed last year, did you survey the same general area this year? Yes / No If no, summarize in comments below.

NA

Vegetation Characteristics: Overall, are the species in tree/shrub layer at this site comprised predominantly of (check one):

☒ Native broadleaf plants

(entirely or almost entirely, includes high-elevation willow)

☐ Mixed native and exotic plants (mostly native)

☐ Mixed native and exotic plants (mostly exotic)

☐ Exotic/introduced plants (entirely or almost entirely)

Identify the 2-3 predominant tree/shrub species: Juniperus sp. - Salix sp.

Average height of canopy: 3 m (specify units)

Was surface water or saturated soil present at or adjacent to site? Yes No (circle one)

Distance from the site to surface water or saturated soil: 0 m (specify units)

Did hydrological conditions change significantly among visits (did the site flood or dry out)? Yes No (circle one)  
yes, describe in comments section below.

Remember to attach a xerox copy of a USGS quad/topographical map (REQUIRED) of the survey area, noting the survey site and location of WIFL detections. You may also include a sketch or aerial photograph showing details of site location, patch shape, survey site in relation to patch, and location of any willow flycatchers or willow flycatcher nests detected. Such sketches or photographs are welcomed, but DO NOT substitute for the required USGS quad map.

Comments (attach additional sheets if necessary):



Willow Flycatcher Survey and Detection Form (rev. 4/98)

Site Name La Jara State Wildlife Area  
 If yes, what site name was used? NA

Was site surveyed in previous year? Yes ☐ No ☒

County Conejos

State CO

USGS Quad Name Vincente Canyon

Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? ☒ Yes ☐ No  
 Site Coordinates: Start N 4115732 E 0392724 UTM  
 Stop: N 414406 E 0392751 UTM  
 Elevation 2577 feet/meters (circle one) Zone 13S

**\*\* Fill in additional site information on back of this page \*\***

| Survey #<br>Observer(s)                             | Date (m/d/y)<br>Survey time  | Number<br>of WIFLs<br>Found | Estimated<br>Number<br>of Pairs | Estimated<br>Number of<br>Territories | Nest(s)<br>Found?<br>Y or N | Cowbirds<br>Detected?<br>Y or N  | Presence of<br>Livestock,<br>Recent sign<br>Y or N | Comments about this survey<br>(e.g., evidence of pairs or<br>breeding, number of nests, nest<br>contents or number of fledges<br>seen; potential threats) |
|---|--|-----------------------------|---------------------------------|---------------------------------------|-----------------------------|--|--|---|
| 1 <u>Rich Simon</u><br><u>Giff Evans</u>            | Date <u>5-24-02</u><br>start <u>6:20</u><br>stop <u>8:50</u><br>total hrs <u>2 1/2</u> | <u>0</u>                    | <u>0</u>                        | <u>0</u>                              | <u>N</u>                    | <u>Y</u>   | <u>N</u>   | Little suitable<br>Habitat<br>one flycatcher seen,<br>no response to tape   |
| 2 <u>RS</u>   | Date <u>6/3/02</u><br>Start <u>6:00</u><br>Stop <u>8:15</u><br>total hrs <u>2 1/4</u>  | <u>0</u>                    | <u>0</u>                        | <u>0</u>                              | <u>N</u>                    | <u>Y</u>   | <u>N</u>   | more water<br>in stream.  |
| 3 <u>CE</u>   | Date <u>6-26-02</u><br>Start <u>5:30</u><br>Stop <u>7:00</u><br>total hrs <u>1 1/2</u> | <u>0</u>                    | <u>0</u>                        | <u>0</u>                              | <u>N</u>                    | <u>Y</u>   | <u>N</u>   |   |
|   | Date<br>start<br>stop<br>total hrs   |                             |                                 |                                       |                             |  |  |   |
|   | Date<br>start<br>stop<br>total hrs   |                             |                                 |                                       |                             |  |  |   |
| Overall Site Summary<br>(Total only resident WIFLs) |  | Adults                      | Pairs                           | Territories                           | Nests                       | Were any WIFLs color-banded? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |  |   |
| Total survey hrs <u>6 1/4</u>                       |  | <u>0</u>                    | <u>0</u>                        | <u>0</u>                              | <u>0</u>                    | If yes, report color combination(s) in the comments section on back of form                      |  |   |

Name of Reporting Individual Lynn Alterman

Date Report Completed 7/23/02

Submit the original of this form. Retain a copy for your records.

Fill in the following information completely. Submit original form. Retain copy for your records.

Name of Reporting Individual Lynn Alterman Phone # (505) 828-9455  
Affiliation Hawks Aloft, Inc. Email lalterman@hawksaloft.org  
Site Name La Jara State Wildlife Area  
Did you verify that this site name is consistent with that used in previous years? Yes No (circle one)

Management Authority for Survey Area (circle one): Federal Municipal/County State Tribal Private

Name of Management Entity or Owner (e.g., Tonto National Forest) Colorado Division of Wildlife

Length of area surveyed: 1.6 Km (specify units, e.g., miles = mi, kilometers = km, meters = m)

Did you survey the same general area during each visit to this site this year? Yes No If no, summarize in comments below.

If site was surveyed last year, did you survey the same general area this year? Yes / No If no, summarize in comments below.

Vegetation Characteristics: Overall, are the species in tree/shrub layer at this site comprised predominantly of (check one):

- ☒ Native broadleaf plants (entirely or almost entirely, includes high-elevation willow)  
☐ Mixed native and exotic plants (mostly native)  
☐ Mixed native and exotic plants (mostly exotic)  
☐ Exotic/introduced plants (entirely or almost entirely)

Identify the 2-3 predominant tree/shrub species: Alnus incana, Juniperus sp., Pseudotsuga angustifolia

Average height of canopy: 3.5 m (specify units)

Was surface water or saturated soil present at or adjacent to site? Yes No (circle one)

Distance from the site to surface water or saturated soil: 0 m (specify units)

Did hydrological conditions change significantly among visits (did the site flood or dry out)? Yes No (circle one)

If yes, describe in comments section below. Water level decreased between first and last survey periods

Remember to attach a xerox copy of a USGS quad/topographical map (REQUIRED) of the survey area, noting the survey site and location of WIFL detections. You may also include a sketch or aerial photograph showing details of site location, patch shape, survey route in relation to patch, and location of any willow flycatchers or willow flycatcher nests detected. Such sketches or photographs are welcomed, but DO NOT substitute for the required USGS quad map.

Comments (attach additional sheets if necessary):

more water for 2nd period only

Willow Flycatcher Survey and Detection Form (rev. 4/98)

Site Name Poso Creek

If yes, what site name was used? \_\_\_\_\_

Was site surveyed in previous year? Yes ☐ No ☒

County Conejos

State CO

USGS Quad Name Terrace Reservoir

Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? ☒ Yes ☐ No

Site Coordinates: Start: N 4124954 E 0390071 UTM

Stop: N 4124715 E 0389200 UTM

Elevation 9520 feet/meters (circle one) Zone 13S

**\*\* Fill in additional site information on back of this page \*\***

| Survey #<br>Observer(s)                             | Date (m/d/y)<br>Survey time   | Number<br>of WIFLs<br>Found | Estimated<br>Number<br>of Pairs | Estimated<br>Number of<br>Territories | Nest(s)<br>Found?<br>Y or N | Cowbirds<br>Detected?<br>Y or N   | Presence of<br>Livestock,<br>Recent sign<br>Y or N | Comments about this survey<br>(e.g., evidence of pairs or<br>breeding, number of nests, nest<br>contents or number of fledges<br>seen; potential threats) |
|---|---|-----------------------------|---------------------------------|---------------------------------------|-----------------------------|---|--|---|
| 1 <u>BJS</u><br><u>GE</u>                           | Date <u>5-26-02</u><br>start <u>6:00</u><br>stop <u>6:30</u><br>total hrs <u>1</u>    | <u>0</u>                    | <u>0</u>                        | <u>0</u>                              | <u>N</u>                    | <u>N</u>  | <u>N</u>   |   |
| 2 <u>BJS</u>  | Date <u>6-3-02</u><br>Start <u>6:00</u><br>Stop <u>7:50</u><br>total hrs <u>1 3/4</u> | <u>0</u>                    | <u>0</u>                        | <u>0</u>                              | <u>N</u>                    | <u>Y</u>  | <u>N</u>   |   |
| 3 <u>GE</u>   | Date <u>6-26</u><br>Start <u>7:30</u><br>Stop <u>8:30</u><br>total hrs <u>1.0</u>     | <u>0</u>                    | <u>0</u>                        | <u>0</u>                              | <u>N</u>                    | <u>Y</u>  | <u>N</u>   |   |
| _____   | Date _____<br>start _____<br>stop _____<br>total hrs _____                            |                             |                                 |                                       |                             |   |  |   |
| _____   | Date _____<br>start _____<br>stop _____<br>total hrs _____                            |                             |                                 |                                       |                             |   |  |   |
| Overall Site Summary<br>(Total only resident WIFLs) |   | Adults                      | Pairs                           | Territories                           | Nests                       | Were any WIFLs color-banded? Yes No   |  |   |
| Total survey hrs <u>3 1/4</u>                       |   | <u>0</u>                    | <u>0</u>                        | <u>0</u>                              | <u>0</u>                    | If yes, report color combination(s) in the comments section on back of form |  |   |

Name of Reporting Individual LYNN ALTEMAN

Date Report Completed 7/23/02

Submit the original of this form. Retain a copy for your records.

Fill in the following information completely. Submit original form. Retain copy for your records.

Name of Reporting Individual Lynn Alterman

Phone # (505) 828-9455

Affiliation Hawks Aloft Inc.

Email lalterman@hawksaloft.org

Site Name Poso Creek

Did you verify that this site name is consistent with that used in previous years? Yes No (circle one)

Management Authority for Survey Area (circle one):

Federal Municipal/County State Tribal Private

Name of Management Entity or Owner (e.g., Tonto National Forest) Colorado Division of Wildlife

Length of area surveyed: 0.9 Km (specify units, e.g., miles = mi, kilometers = km, meters = m)

Did you survey the same general area during each visit to this site this year? Yes No If no, summarize in comments below.

If site was surveyed last year, did you survey the same general area this year? Yes / No If no, summarize in comments below.

Vegetation Characteristics: Overall, are the species in tree/shrub layer at this site comprised predominantly of (check one):

☒ Native broadleaf plants  
(entirely or almost entirely, includes high-elevation willow)

☐ Mixed native and exotic plants (mostly native)

☐ Mixed native and exotic plants (mostly exotic)

☐ Exotic/introduced plants (entirely or almost entirely)

Identify the 2-3 predominant tree/shrub species: Salix sp., Cottonwood (Populus sp.), Rabbitbrush (Ericameria sp.)

Average height of canopy: 3 m (specify units)

Was surface water or saturated soil present at or adjacent to site? Yes No (circle one)

Distance from the site to surface water or saturated soil: NA (specify units)

Did hydrological conditions change significantly among visits (did the site flood or dry out)? Yes No (circle one)  
If yes, describe in comments section below.

Remember to attach a xerox copy of a USGS quad/topographical map (REQUIRED) of the survey area, noting the survey site and location of WIFL detections. You may also include a sketch or aerial photograph showing details of site location, patch shape, survey route in relation to patch, and location of any willow flycatchers or willow flycatcher nests detected. Such sketches or photographs are welcomed, but DO NOT substitute for the required USGS quad map.

Comments (attach additional sheets if necessary): There was no water present during any of the survey periods.

Willow Flycatcher Survey and Detection Form (rev. 4/98)

Site Name Rio Grande State WL Area Site 1  
 If yes, what site name was used? NA Was site surveyed in previous year? Yes ☐ No ☒

County Rio Grande State CO USGS Quad Name Home Lake

Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? ☒ Yes ☐ No  
 Site Coordinates: Start N 4159830 E 0403453 UTM  
 Stop N 4159199 E 0405282 UTM  
 Elevation 2321 feet/meters (circle one) UTM Zone 13S

**\*\* Fill in additional site information on back of this page \*\***

| Survey #<br>Observer(s)     | Date (m/d/y)<br>Survey time   | Number<br>of WIFLs<br>Found | Estimated<br>Number<br>of Pairs | Estimated<br>Number of<br>Territories | Nest(s)<br>Found?<br>Y or N | Cowbirds<br>Detected?<br>Y or N | Presence of<br>Livestock,<br>Recent sign<br>Y or N | Comments about this survey<br>(e.g., evidence of pairs or<br>breeding, number of nests, nest<br>contents or number of fledges<br>seen; potential threats) |
|-----------------------------|---|-----------------------------|---------------------------------|---------------------------------------|-----------------------------|---------------------------------|--|---|
| <u>Rich</u><br><u>Sim</u>   | Date <u>5/25</u><br>start <u>5:30</u><br>stop <u>9:00</u><br>total hrs <u>3 1/2</u>   | <u>5</u>                    | <u>0</u>                        | <u>5</u>                              | <u>N</u>                    | <u>Y</u>                        | <u>Y</u>   | <u>birds became</u><br><u>more evident as</u><br><u>morning progressed</u><br><u>30°F @ 6 AM</u>  |
| <u>2 Rich</u><br><u>Sim</u> | Date <u>6/5/02</u><br>Start <u>5:45</u><br>Stop <u>9:00</u><br>total hrs <u>3 1/4</u> | <u>9</u>                    | <u>0</u>                        | <u>9</u>                              | <u>N</u>                    | <u>Y</u>                        | <u>Y</u>   | <u>9, possibly 11, birds</u><br><u>were fitz-bewing</u><br><u>their hearts out.</u>   |
| <u>3 L.A.</u>               | Date <u>7/2/02</u><br>Start <u>0600</u><br>Stop <u>0940</u><br>total hrs <u>3 1/2</u> | <u>10</u>                   | <u>0</u>                        | <u>10</u>                             | <u>N</u>                    | <u>Y</u>                        | <u>Y</u>   | <u>All birds were</u><br><u>singing and likely</u><br><u>males.</u>   |
|                             | Date<br>start<br>stop<br>total hrs  |                             |                                 |                                       |                             |                                 |  |   |
|                             | Date<br>start<br>stop<br>total hrs  |                             |                                 |                                       |                             |                                 |  |   |

|  |           |          |             |          |  |
|--|-----------|----------|-------------|----------|--|
| Overall Site Summary<br>Total only resident WIFLs) | Adults    | Pairs    | Territories | Nests    | Were any WIFLs color-banded? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
|  | <u>10</u> | <u>0</u> | <u>10</u>   | <u>0</u> | If yes, report color combination(s) in the comments section on back of form                      |

total survey hrs 10 1/4

Name of Reporting Individual Lynn Alterman

Date Report Completed 7/23/02

Submit the original of this form. Retain a copy for your records.

Fill in the following information completely. Submit original form. Retain copy for your records.

Name of Reporting Individual Lynn Alterman

Phone # (505) 828-9455

Affiliation Hawks Aloft, Inc.

Email lalterman@hawksaloft.com

Site Name Rio Grande State Wildlife Area - Section 1.

Did you verify that this site name is consistent with that used in previous years? Yes No (circle one)

Management Authority for Survey Area (circle one):

Federal Municipal/County State Tribal Private

Name of Management Entity or Owner (e.g., Tonto National Forest) Colorado Division of Wildlife

Length of area surveyed: 2.0 Km (specify units, e.g., miles = mi, kilometers = km, meters = m)

Did you survey the same general area during each visit to this site this year? Yes No If no, summarize in comments below.

If site was surveyed last year, did you survey the same general area this year? Yes / No If no, summarize in comments below.

Vegetation Characteristics: Overall, are the species in tree/shrub layer at this site comprised predominantly of (check one):

☒ Native broadleaf plants

(entirely or almost entirely, includes high-elevation willow)

☐ Mixed native and exotic plants (mostly native)

☐ Mixed native and exotic plants (mostly exotic)

☐ Exotic/introduced plants (entirely or almost entirely)

Identify the 2-3 predominant tree/shrub species: Salix exigua, Salix amygdaloides

Average height of canopy: 4m (S. exigua) (specify units)

Was surface water or saturated soil present at or adjacent to site? Yes No (circle one)

Distance from the site to surface water or saturated soil: 0m (specify units)

Did hydrological conditions change significantly among visits (did the site flood or dry out)? Yes No (circle one)

If yes, describe in comments section below. Water level decreased from first to the third survey period

Remember to attach a xerox copy of a USGS quad/topographical map (REQUIRED) of the survey area, noting the survey site and location of WIFL detections. You may also include a sketch or aerial photograph showing details of site location, patch shape, survey site in relation to patch, and location of any willow flycatchers or willow flycatcher nests detected. Such sketches or photographs are welcomed, but DO NOT substitute for the required USGS quad map.

Comments (attach additional sheets if necessary):

Willow Flycatcher Survey and Detection Form (rev. 4/98)

Site Name Rio Grande State Wildlife Area - Section 2 (North)

If yes, what site name was used? NA

Was site surveyed in previous year? Yes ☐ No ☒

County Rio Grande

State CO

USGS Quad Name Home Lake

Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? ☒ Yes ☐ No

Site Coordinates: Start N 4158771 E 0408290 UTM

Stop: N 4159571 E 0405483 UTM

Elevation 2324 feet / (meters) (circle one) UTM Zone 13S

**\*\* Fill in additional site information on back of this page \*\***

| Survey #<br>Observer(s)                             | Date (m/d/y)<br>Survey time  | Number<br>of WIFLs<br>Found | Estimated<br>Number<br>of Pairs | Estimated<br>Number of<br>Territories | Nest(s)<br>Found?<br>Y or N | Cowbirds<br>Detected?<br>Y or N  | Presence of<br>Livestock,<br>Recent sign<br>Y or N | Comments about this survey<br>(e.g., evidence of pairs or<br>breeding, number of nests, nest<br>contents or number of fledges<br>seen; potential threats) |
|---|--|-----------------------------|---------------------------------|---------------------------------------|-----------------------------|--|--|---|
| 1 <u>BJS</u>  | Date <u>5/25/02</u><br>start <u>0600</u><br>stop <u>1000</u><br>total hrs <u>4.2</u>                 | 5                           | 1                               | 4                                     | No                          | Yes  | Yes  | Very Cold in<br>morning. Birds<br>became more Evident<br>as morning progressed<br>1 possible pair at 02   |
| 2 <u>BJS</u><br><u>RRS</u>                          | Date <u>6/6/02</u><br><u>6/7/02</u><br>Start <u>0600</u><br>Stop <u>0530</u><br>total hrs <u>8.5</u> | 12                          | 1                               | 11                                    | N                           | Y  | Y  |   |
| 3 <u>BJS</u>  | Date <u>6/25-7/1/02</u><br>Start <u>5:30</u><br>Stop <u>6:00</u><br>total hrs <u>12.5</u>            | <del>16</del><br>16         | <del>2</del><br>2               | <del>14</del><br>14                   | N                           | Y  | Y  | Also had 1 bird respond<br>to tape - but no flight  |
|   | Date<br>start<br>stop<br>total hrs   |                             |                                 |                                       |                             |  |  |   |
|   | Date<br>start<br>stop<br>total hrs   |                             |                                 |                                       |                             |  |  |   |
| Overall Site Summary<br>(Total only resident WIFLs) |  | Adults                      | Pairs                           | Territories                           | Nests                       | Were any WIFLs color-banded? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |  |   |
| Total survey hrs <u>28.5</u>                        |  | 16                          | 2                               | 14                                    | 0                           | If yes, report color combination(s) in the comments section on back of form                      |  |   |

Name of Reporting Individual Lynn Alterman

Date Report Completed 7/23/02

Fill in the following information completely. Submit original form. Retain copy for your records.

Name of Reporting Individual LYNN Alterman

Phone # (505) 828-9455

Affiliation Hawks Aloft Inc.

Email lalterman@hawksaloft.com

Site Name Rio Grande State Wildlife Area - Section 2 (North)

Did you verify that this site name is consistent with that used in previous years? ☒ Yes ☐ No (circle one)

Management Authority for Survey Area (circle one):

Federal Municipal/County ☒ State ☐ Tribal ☐ Private

Name of Management Entity or Owner (e.g., Tonto National Forest) Colorado Division of Wildlife

Length of area surveyed: 2.9 km (specify units, e.g., miles = mi, kilometers = km, meters = m)

Did you survey the same general area during each visit to this site this year? ☒ Yes ☐ No If no, summarize in comments below.

If site was surveyed last year, did you survey the same general area this year? Yes ☐ No ☐ If no, summarize in comments below.

Vegetation Characteristics: Overall, are the species in tree/shrub layer at this site comprised predominantly of (check one):  
☒ Native broadleaf plants (entirely or almost entirely, includes high-elevation willow)  
☐ Mixed native and exotic plants (mostly native)  
☐ Mixed native and exotic plants (mostly exotic)  
☐ Exotic/introduced plants (entirely or almost entirely)

Identify the 2-3 predominant tree/shrub species: Populus angustifolia, Salix sp.

Average height of canopy: 7 m (specify units)

Was surface water or saturated soil present at or adjacent to site? ☒ Yes ☐ No (circle one)  
Distance from the site to surface water or saturated soil: 0 m (specify units)

Did hydrological conditions change significantly among visits (did the site flood or dry out)? ☒ Yes ☐ No (circle one)  
If yes, describe in comments section below.

Remember to attach a xerox copy of a USGS quad/topographical map (REQUIRED) of the survey area, noting the survey site and location of WIFL detections. You may also include a sketch or aerial photograph showing details of site location, patch shape, survey site in relation to patch, and location of any willow flycatchers or willow flycatcher nests detected. Such sketches or photographs are encouraged, but DO NOT substitute for the required USGS quad map.

Comments (attach additional sheets if necessary): The San Luis Valley was very dry this survey season. The water levels in the ponds and temporary areas dropped throughout the survey period. During the last period much of the Sierrita marshy areas were dry enough to walk on. The ponds shrank by about 50 percent.



Willow Flycatcher Survey and Detection Form (rev. 4/98)

Site Name Rio Grande State Wildlife Area - Section 2 (South)

If yes, what site name was used? NA

Was site surveyed in previous year? Yes ☐ No ☒

County Rio Grande

State CO

USGS Quad Name Home Lake

Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? ☒ Yes ☐ No

Site Coordinates: Start: N 4158638 E 0405776 UTM

Stop: N 4157998 E 0408137 UTM

Elevation 2334 feet/(meters)(circle one) Zone 12S

**\*\* Fill in additional site information on back of this page \*\***

| Survey #<br>Observer(s)                             | Date (m/d/y)<br>Survey time   | Number<br>of WIFLs<br>Found | Estimated<br>Number<br>of Pairs | Estimated<br>Number of<br>Territories | Nest(s)<br>Found?<br>Y or N | Cowbirds<br>Detected?<br>Y or N  | Presence of<br>Livestock,<br>Recent sign<br>Y or N | Comments about this survey<br>(e.g., evidence of pairs or<br>breeding, number of nests, nest<br>contents or number of fledges<br>seen; potential threats) |
|---|---|-----------------------------|---------------------------------|---------------------------------------|-----------------------------|--|--|---|
| <u>1</u><br><u>Groff</u>                            | Date <u>5-25</u><br>start <u>0550</u><br>stop <u>10:00</u><br>total hrs <u>4</u>      | <u>1</u>                    | <u>0</u>                        | <u>1</u>                              | <u>N</u>                    | <u>N</u>   | <u>Y</u>   |   |
| <u>2</u><br><u>RS</u>                               | Date <u>6-6-02</u><br>Start <u>6:00</u><br>Stop <u>8:45</u><br>total hrs <u>2 3/4</u> | <u>1</u>                    | <u>0</u>                        | <u>1</u>                              | <u>N</u>                    | <u>N</u>   | <u>N</u>   |   |
| <u>3</u><br><u>GE</u>                               | Date <u>6-24</u><br>Start <u>6:00</u><br>Stop <u>10:00</u><br>total hrs <u>4</u>      | <u>0</u>                    | <u>0</u>                        | <u>0</u>                              | <u>N</u>                    | <u>Y</u>   | <u>N</u>   |   |
|   | Date<br>start<br>stop<br>total hrs  |                             |                                 |                                       |                             |  |  |   |
|   | Date<br>start<br>stop<br>total hrs  |                             |                                 |                                       |                             |  |  |   |
| Overall Site Summary<br>(Total only resident WIFLs) |   | Adults                      | Pairs                           | Territories                           | Nests                       | Were any WIFLs color-banded? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |  |   |
| Total survey hrs <u>10 3/4</u>                      |   | <u>0</u>                    | <u>0</u>                        | <u>0</u>                              | <u>0</u>                    | If yes, report color combination(s) in the comments section on back of form                      |  |   |

Name of Reporting Individual Lynn Albrecht

Date Report Completed 7/23/02

Fill in the following information completely. Submit original form. Retain copy for your records.

Name of Reporting Individual Lynn Alterman

Affiliation Hawks Aloft, Inc.

Phone # (505) 838-9455

Site Name Rio Grande State Wildlife Area - Section C

Email lalterman@hawksaloft.com

Did you verify that this site name is consistent with that used in previous years? ☒ Yes ☐ No (circle one)

Management Authority for Survey Area (circle one):

Federal Municipal/County ☒ State ☐ Tribal ☐ Private

Name of Management Entity or Owner (e.g., Tonto National Forest) Colorado Division of Wildlife

Length of area surveyed: 2.5 Km (specify units, e.g., miles = mi, kilometers = km, meters = m)

Did you survey the same general area during each visit to this site this year? ☒ Yes ☐ No If no, summarize in comments below.

If site was surveyed last year, did you survey the same general area this year? Yes / No If no, summarize in comments below.

Vegetation Characteristics: Overall, are the species in tree/shrub layer at this site comprised predominantly of (check one):

☒ Native broadleaf plants

(entirely or almost entirely, includes high-elevation willow)

☐ Mixed native and exotic plants (mostly native)

☐ Mixed native and exotic plants (mostly exotic)

☐ Exotic/introduced plants (entirely or almost entirely)

Identify the 2-3 predominant tree/shrub species: Populus angustifolia, Salix sp

Average height of canopy: 7 m (specify units)

Was surface water or saturated soil present at or adjacent to site? ☒ Yes ☐ No (circle one)

Distance from the site to surface water or saturated soil: 0 m (specify units)

Did hydrological conditions change significantly among visits (did the site flood or dry out)? Yes No (circle one)

If yes, describe in comments section below: Water level decreased from period 1 through period 3.

Remember to attach a xerox copy of a USGS quad/topographical map (REQUIRED) of the survey area, noting the survey site and location of WIFL detections. You may also include a sketch or aerial photograph showing details of site location, patch shape, survey site in relation to patch, and location of any willow flycatchers or willow flycatcher nests detected. Such sketches or photographs are welcomed, but DO NOT substitute for the required USGS quad map.

Comments (attach additional sheets if necessary):

Willow Flycatcher Survey and Detection Form (rev. 4/98)

Site Name Sego Spring State Wildlife Area  
 If yes, what site name was used? 0 NA Was site surveyed in previous year? Yes ☐ No ☒

County Conejos State CO USGS Quad Name Manassa

Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? ☒ Yes ☐ No  
 Site Coordinates: Start N 4116226 E 0421309 UTM  
 Stop: N 4117221 E 0422000 UTM  
 Elevation 2347 feet (meters (circle one)) UTM Zone 13S

**\*\* Fill in additional site information on back of this page \*\***

| Survey #<br>Observer(s)                             | Date (m/d/y)<br>Survey time  | Number<br>of WIFLs<br>Found | Estimated<br>Number<br>of Pairs | Estimated<br>Number of<br>Territories | Nest(s)<br>Found?<br>Y or N | Cowbirds<br>Detected?<br>Y or N  | Presence of<br>Livestock,<br>Recent sign<br>Y or N | Comments about this survey<br>(e.g., evidence of pairs or<br>breeding, number of nests, nest<br>contents or number of fledges<br>seen; potential threats) |
|---|--|-----------------------------|---------------------------------|---------------------------------------|-----------------------------|--|--|---|
| <sup>1</sup> <u>BJS</u>                             | Date <u>5/31/02</u><br>start <u>0530</u><br>stop <u>1000</u><br>total hrs <u>4 1/2</u> | <u>2</u>                    | <u>0</u>                        | <u>2</u>                              | <u>N</u>                    | <u>Y</u>   | <u>Y</u>   | <u>2 WIFLs found<br/>Near Goose Basket<br/>#15</u>  |
| <sup>2</sup> <u>GE</u>                              | Date <u>6/13/02</u><br>Start <u>0600</u><br>Stop <u>0945</u><br>total hrs <u>3 3/4</u> | <u>0</u>                    | <u>0</u>                        | <u>0</u>                              | <u>N</u>                    | <u>Y</u>   | <u>Y</u>   |   |
| <sup>3</sup> <u>LA</u>                              | Date <u>7/3/02</u><br>Start <u>0600</u><br>Stop <u>0930</u><br>total hrs <u>3 1/2</u>  | <u>0</u>                    | <u>0</u>                        | <u>0</u>                              | <u>N</u>                    | <u>Y</u>   | <u>Y</u>   | <u>1 Empidonax sp.<br/>found that made<br/>the whist call in<br/>response to tape-<br/>did not fitz bew.</u>  |
|   | Date<br>start<br>stop<br>total hrs   |                             |                                 |                                       |                             |  |  |   |
|   | Date<br>start<br>stop<br>total hrs   |                             |                                 |                                       |                             |  |  |   |
| Overall Site Summary<br>(Total only resident WIFLs) |  | Adults                      | Pairs                           | Territories                           | Nests                       | Were any WIFLs color-banded? Yes <input type="radio"/> No <input checked="" type="radio"/> |  |   |
| Total survey hrs <u>11 3/4</u>                      |  | <u>0</u>                    | <u>0</u>                        | <u>0</u>                              | <u>0</u>                    | If yes, report color combination(s) in the comments section on back of form                |  |   |

Name of Reporting Individual LYNN Alterman

Date Report Completed 7/23/02

Submit the original of this form.

Fill in the following information completely. Submit original form. Retain copy for your records.

Name of Reporting Individual LYNN Alterman Phone # (505) 828-9455  
Affiliation Hawks Aloft, Inc. Email lalterman@hawksaloft.org  
Site Name Sego Spring State Wildlife Area

Did you verify that this site name is consistent with that used in previous years? (Yes) No (circle one)

Management Authority for Survey Area (circle one): Federal Municipal/County (State) Tribal Private

Name of Management Entity or Owner (e.g., Tonto National Forest) Colorado Division of Wildlife

Length of area surveyed: 1.3 Km (specify units, e.g., miles = mi, kilometers = km, meters = m)

Did you survey the same general area during each visit to this site this year? (Yes) No If no, summarize in comments below.

If site was surveyed last year, did you survey the same general area this year? Yes / No If no, summarize in comments below.

NA

Vegetation Characteristics: Overall, are the species in tree/shrub layer at this site comprised predominantly of (check one):

- ☒ Native broadleaf plants (entirely or almost entirely, includes high-elevation willow)  
☐ Mixed native and exotic plants (mostly native)  
☐ Mixed native and exotic plants (mostly exotic)  
☐ Exotic/introduced plants (entirely or almost entirely)

Identify the 2-3 predominant tree/shrub species: Salix exigua, Populus angustifolia

Average height of canopy: 4 m (specify units)

Was surface water or saturated soil present at or adjacent to site? (Yes) No (circle one)

Distance from the site to surface water or saturated soil: 0m (specify units)

Did hydrological conditions change significantly among visits (did the site flood or dry out)? (Yes) No (circle one)

If yes, describe in comments section below. Water level decreased from the

time of the first survey period through the third period.

Remember to attach a xerox copy of a USGS quad/topographical map (REQUIRED) of the survey area, noting the survey site and location of WIFL detections. You may also include a sketch or aerial photograph showing details of site location, patch shape, survey route in relation to patch, and location of any willow flycatchers or willow flycatcher nests detected. Such sketches or photographs are welcomed, but DO NOT substitute for the required USGS quad map.

Comments (attach additional sheets if necessary):

## APPENDIX E.

UTM coordinates for Southwestern Willow Flycatchers detected at Alamosa National Wildlife Refuge.

| Survey Area        | UTM Coordinates <sup>a</sup> |                          |                            |
|--------------------|------------------------------|--------------------------|----------------------------|
|                    | Period 1                     | Period 2                 | Period 3                   |
| North Survey Route |                              | # 1 4143784<br>0428978   | # 1 4143788<br>0428962     |
|                    |                              | # 2 4143638<br>0428636   | # 2 4143638<br>0428641     |
|                    |                              | # 3 4143491<br>0428393   | # 3 4143478<br>0428339     |
|                    |                              |                          | # 4 4143668<br>0427861     |
| South Survey Route | #1 4137129<br>0431962        | # 1 4143429<br>0429308   | # 1,2 4143493<br>0429289   |
|                    | #2 4135171<br>0432480        | # 2 4143349<br>0429346   | # 3,4 4143264<br>0429379   |
|                    | # 3 4137119<br>0431959       | # 3,4 4142937<br>0430105 | # 5 4142943<br>0430109     |
|                    |                              | # 5,6 4142955<br>0429978 | # 6,7 4142909<br>0430149   |
|                    |                              | # 7 4142817<br>0430303   | # 8,9 4142850<br>0430200   |
|                    |                              | # 8 4142730<br>0430399   | # 10,11 4142720<br>0430406 |
|                    |                              | # 9 4142377<br>0430845   | # 12 4142283<br>0430881    |
|                    |                              | # 10 4142109<br>0430965  | # 13 4142091<br>0430978    |
|                    |                              |                          |                            |

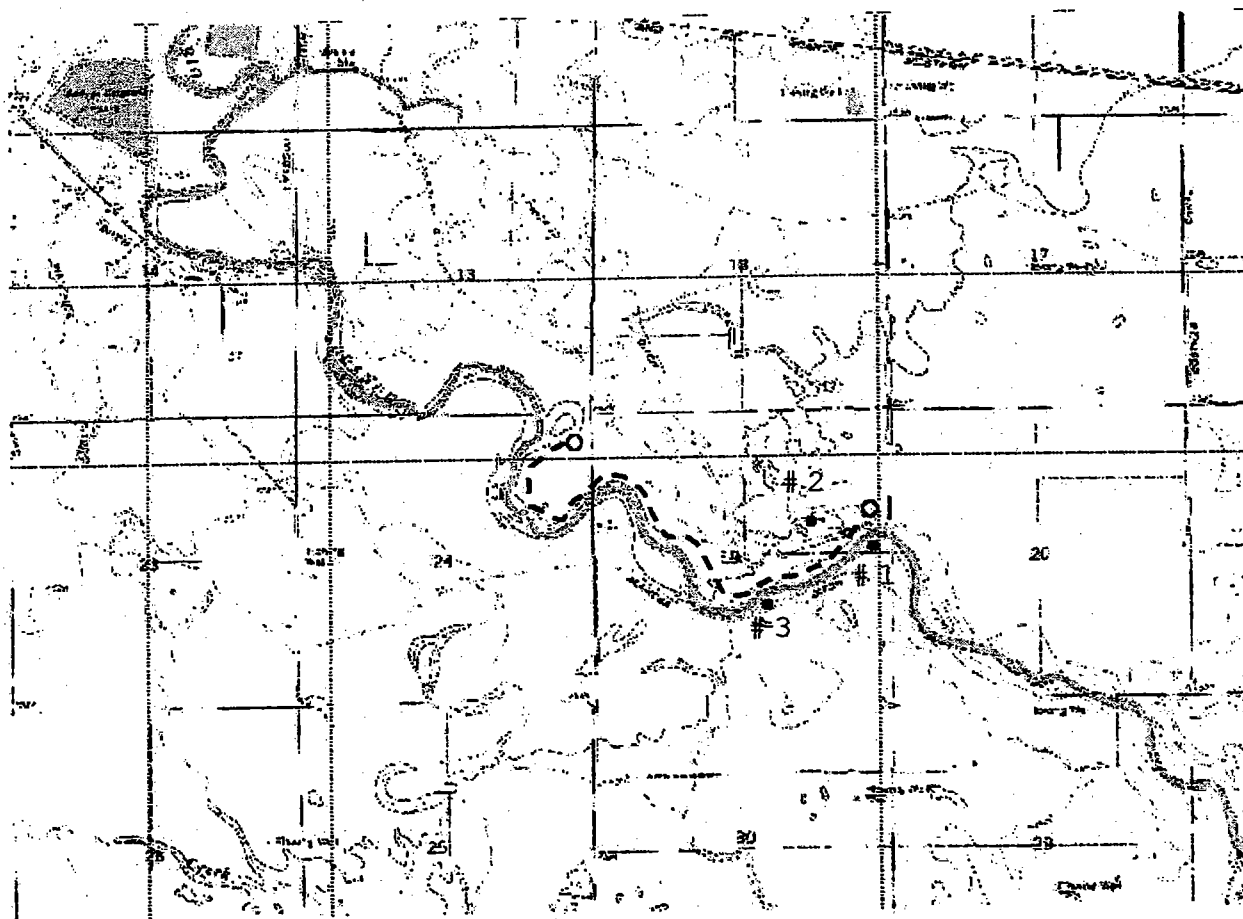
## APPENDIX E, cont.

| Survey Area        | UTM Coordinates <sup>a</sup> |                         |                            |
|--------------------|------------------------------|-------------------------|----------------------------|
|                    | Period 1                     | Period 2                | Period 3                   |
| South Survey Route |                              | # 11 4136205<br>0431810 | # 14 4141991<br>0431031    |
|                    |                              | # 12 4135762<br>0432372 | # 15,16 4136195<br>0431813 |
|                    |                              | # 13 4135569<br>0432356 | # 17 4136169<br>0431923    |
|                    |                              | # 14 4165253<br>0432439 | # 18 4135277<br>0432356    |
|                    |                              | # 15 4135361<br>0432501 | # 19 4135167<br>0432479    |
|                    |                              | # 16 4135151<br>0432483 |                            |

<sup>a</sup> All UTM coordinates were located in Zone 13 S.

APPENDIX F.

**Alamosa National Wildlife Refuge North Survey Route**  
**Southwestern Willow Flycatcher Survey Area, 14 June 2002**  
**Alamosa East USGS 7.5' Quadrangle**

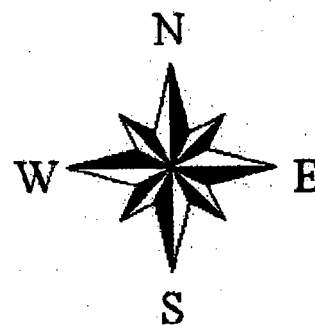


0 1 Kilometers

○ Survey Area Boundary

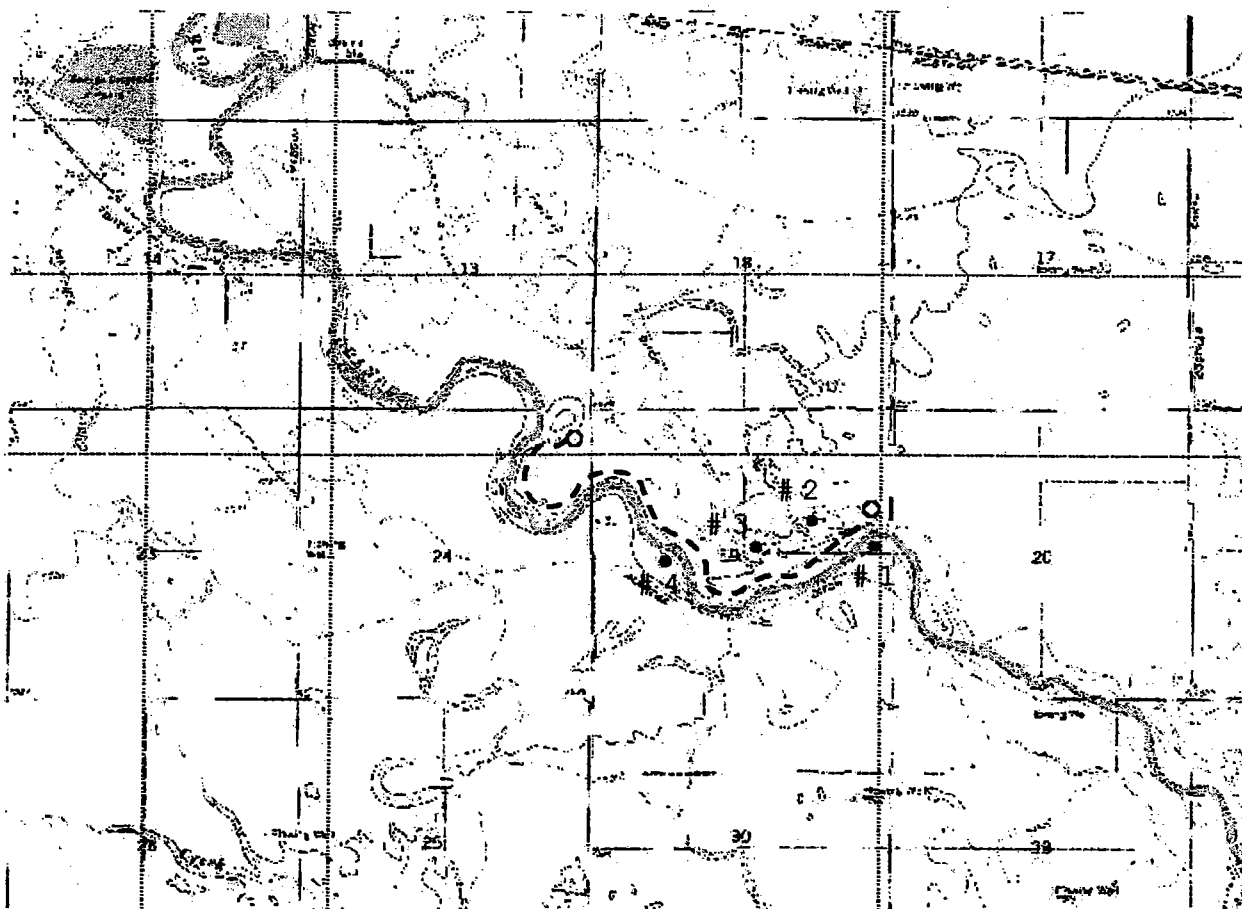
● Southwestern Willow Flycatcher Detection Sites

-- Survey Route



APPENDIX E, cont.

**Alamosa National Wildlife Refuge North Survey Route**  
**Southwestern Willow Flycatcher Survey Area, 28 June 2002**  
**Alamosa East USGS 7.5' Quadrangle**

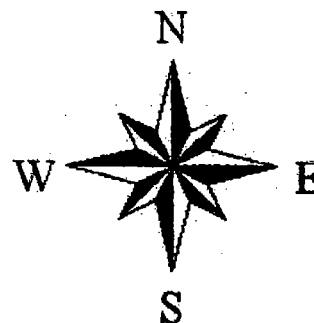


0 1 Kilometers

○ Survey Boundary

● Southwestern Willow Flycatcher Detection Sites

--- Survey Route



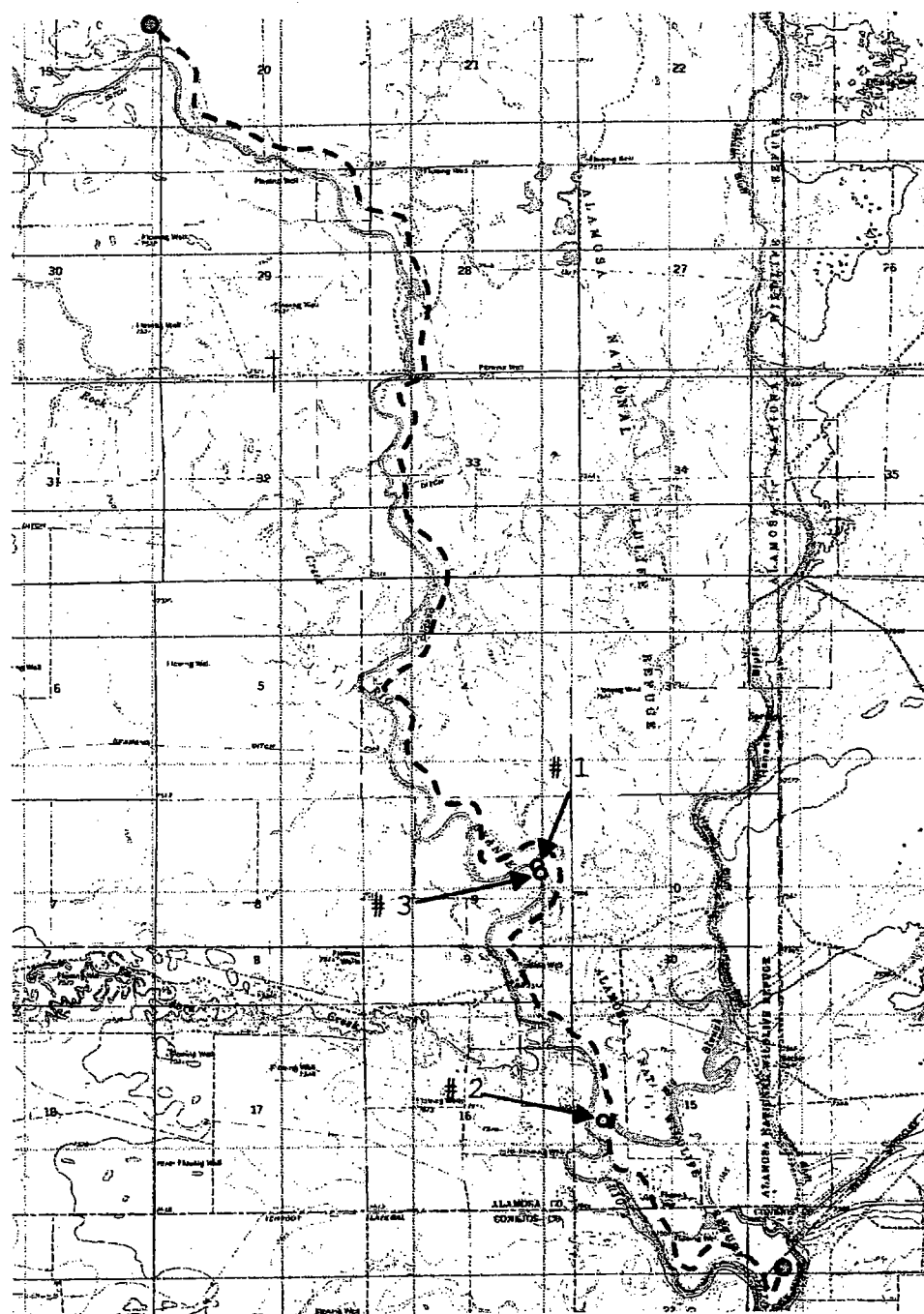


APPENDIX F, cont.

Alamosa National Wildlife Refuge South Survey Route

Southwestern Willow Flycatcher Area, 23 May 2002

Alamosa East, Pikes Stockade, and Lasasues USGS 7.5' Quadrangles



0 1 kilometers

- Southwestern Willow Flycatcher Detection Sites
- Survey Area Boundaries
- Survey Route

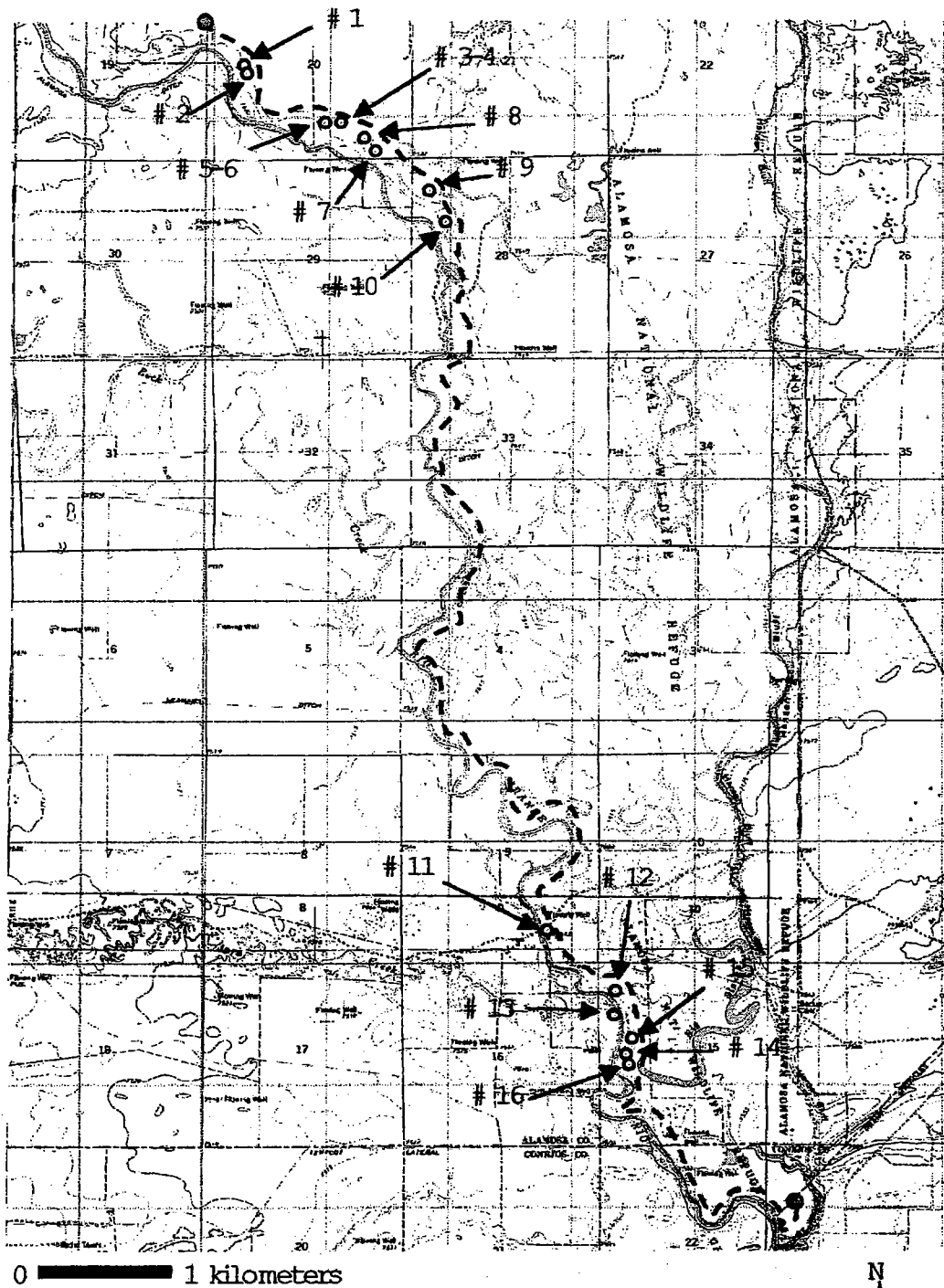


APPENDIX F, cont.

Alamosa National Wildlife Refuge South Survey Route

Southwestern Willow Flycatcher Area, 13 June, 2002

Alamosa East, Pikes Stockade, and Lasasues USGS 7.5' Quadrangles



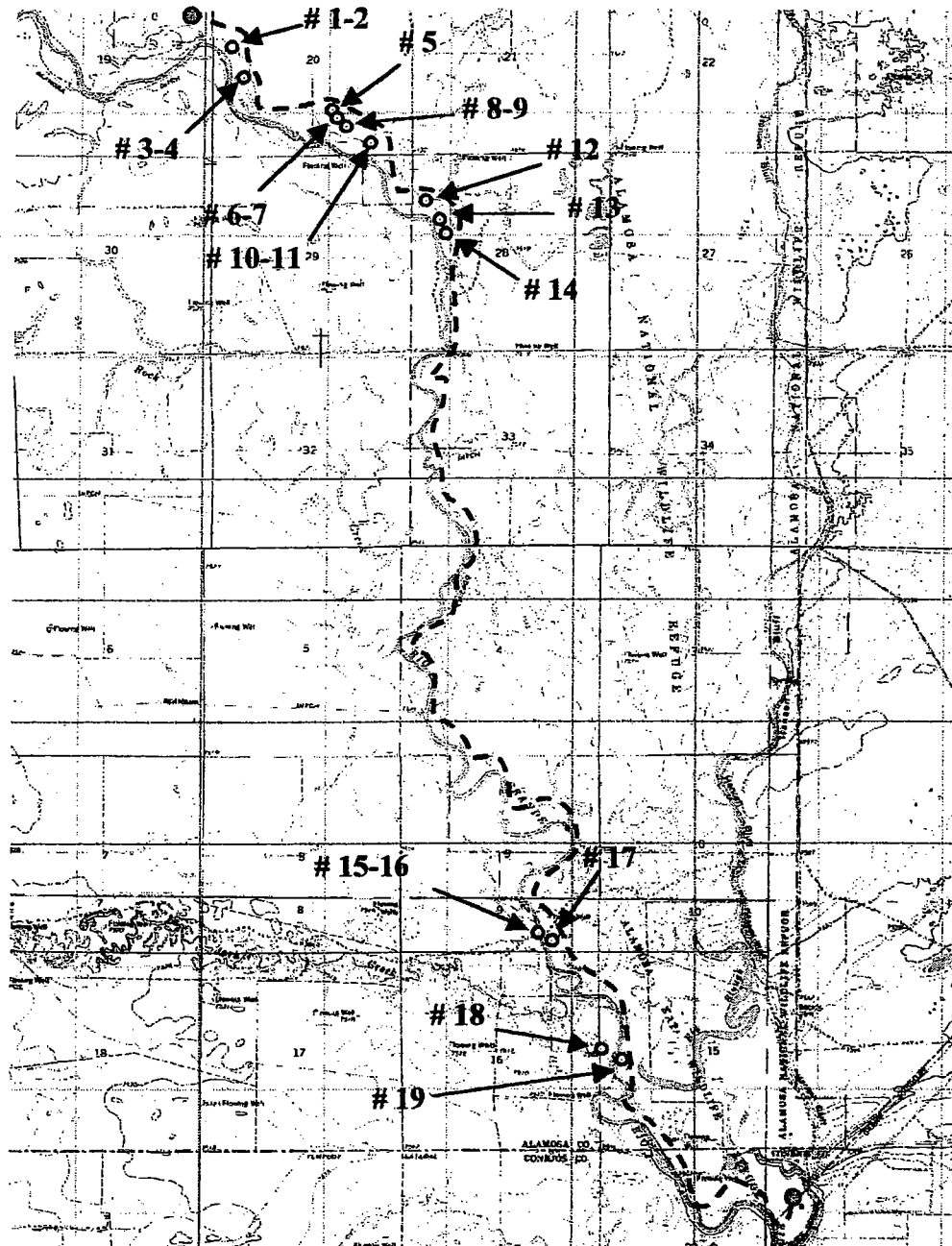
0 1 kilometers

- Southwestern Willow Flycatcher Detection Sites
- Survey Area Boundaries
- Survey Route



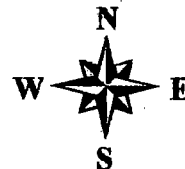
APPENDIX F, cont.

Alamosa National Wildlife Refuge South Survey Route  
Southwestern Willow Flycatcher Area, 27 June 2002  
Alamosa East, Pikes Stockade, and Lasasues USGS 7.5' Quadrangles



0 1 kilometers

- Southwestern Willow Flycatcher Detection Sites
- Survey Area Boundaries
- Survey Route



## APPENDIX G.

UTM coordinates for Southwestern Willow Flycatchers detected at Colorado Division of Wildlife Survey Areas.

| Survey Area           | UTM Coordinates <sup>a</sup> |                          |                        |
|-----------------------|------------------------------|--------------------------|------------------------|
|                       | Period 1                     | Period 2                 | Period 3               |
| Higel                 |                              | # 1 4157192<br>0412692   | # 1 4157445<br>0412361 |
|                       |                              | # 2 4156945<br>0412714   |                        |
| Hot Creek             | # 1 4128155<br>0391070       | # 1 4126465<br>0393086   | # 1 4125812<br>0393780 |
|                       | # 2 4125780<br>0394533       | # 2 4125674<br>0393185   | # 2 4125780<br>0394533 |
|                       |                              | # 3 4125869<br>0393550   |                        |
|                       |                              | # 4 4125812<br>0393780   |                        |
|                       |                              | # 5,6 4126758<br>0392925 |                        |
| Rio Grande, Section 1 | # 1 4159535<br>0404707       | # 1 4159535<br>0404707   | # 1 4159692<br>0404286 |
|                       | # 2 4159582<br>0404783       | # 2 4159582<br>0404783   | # 2 4159632<br>0404575 |
|                       | # 3 4159506<br>0404816       | # 3 4159506<br>0404816   | # 3 4159621<br>0404596 |
|                       | # 4 4159315<br>0404683       | # 4 4159315<br>0404683   | # 4 4159621<br>0404713 |
|                       | # 5 4159283<br>0405270       | # 5 4159283<br>0405270   | # 5 4159568<br>0404744 |

## APPENDIX G, cont.

| Survey Area           | <u>UTM Coordinates</u> <sup>a</sup> |                          |                          |
|-----------------------|-------------------------------------|--------------------------|--------------------------|
|                       | Period 1                            | Period 2                 | Period 3                 |
| Rio Grande, Section 1 |                                     | # 6 4159628<br>0404539   | # 6,7 4159561<br>0404772 |
|                       |                                     | # 7 4159555<br>0404718   | # 8 4159371<br>0405156   |
|                       |                                     | # 8 4159625<br>0404726   | # 9 4159276<br>0405266   |
|                       |                                     | # 9 4159466<br>0405092   | # 10 4159255<br>0405304  |
| Rio Grande, Section 2 | # 1 4159053<br>0405869              | # 1 4158519<br>0407078   | # 1 4159437<br>0405913   |
|                       | # 2,3 4159114<br>0405814            | # 2,3 4158766<br>0406531 | # 2 4159399<br>0405877   |
|                       | # 4 4159401<br>0405220              | # 4 4159152<br>0406591   | # 3 4159300<br>0405960   |
|                       | # 5 4159310<br>0405400              | # 5 4159263<br>0406446   | # 4 4159467<br>0405992   |
|                       |                                     | # 6 4158853<br>0406008   | # 5 4159330<br>0405969   |
|                       |                                     | # 7 4158791<br>0406001   | # 6 4159316<br>0406009   |
|                       |                                     | # 8 4159014<br>0405912   | # 7 4159169<br>0406119   |
|                       |                                     | # 9 4159114<br>0405814   | # 8 4159276<br>0406079   |
|                       |                                     | # 10 4158982<br>0406036  | # 9 4159300<br>0406021   |
|                       |                                     |                          |                          |

**APPENDIX G, cont.**

| Survey Area           | <u>UTM Coordinates</u> <sup>a</sup> |                         |                            |
|-----------------------|-------------------------------------|-------------------------|----------------------------|
|                       | Period 1                            | Period 2                | Period 3                   |
| Rio Grande, Section 2 |                                     | # 11 4158853<br>0406023 | # 10 4158930<br>0406550    |
|                       |                                     | # 12 4158755<br>0406071 | # 11,12 4158951<br>0406595 |
|                       |                                     |                         | # 13 4158951<br>0406675    |
|                       |                                     |                         | # 14,15 4159086<br>0406646 |
|                       |                                     |                         | # 16 4159411<br>0406775    |
| Rio Grande, Section 3 | # 1 4158704<br>0406702              | # 1 4158685<br>0406085  |                            |
| Sego Spring           | # 1 4116340<br>0421386              |                         |                            |
|                       | # 2 4116367<br>0421375              |                         |                            |

---

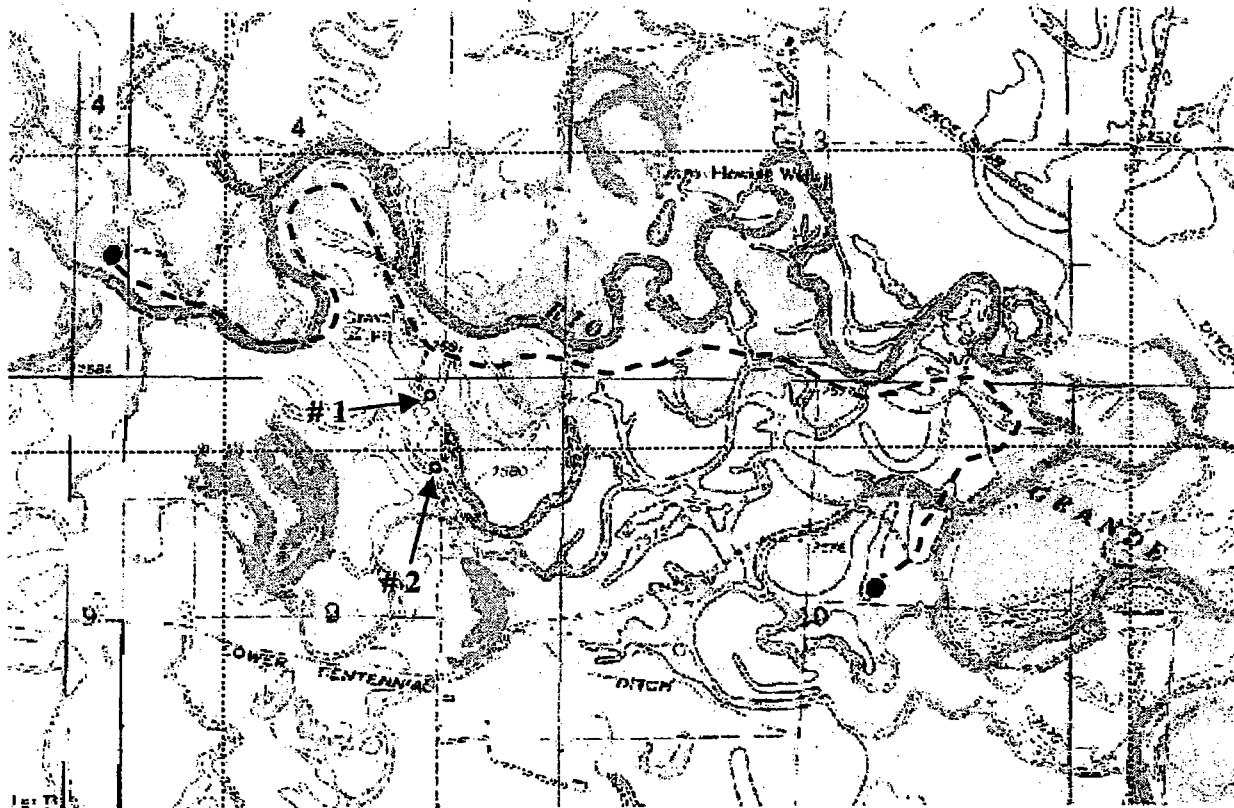
<sup>a</sup> All UTM coordinates were located in Zone 13 S.

**APPENDIX H.**

**Higel State Wildlife Area**

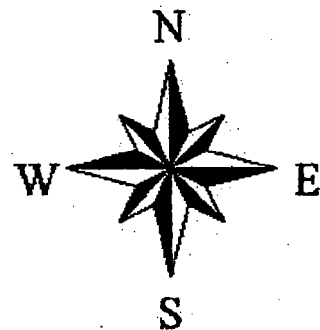
**Southwestern Willow Flycatcher Survey Area, 4 June 2002**

**Mount Pleasant School and Home Lake USGS 7.5' Quadrangles**



0 1 Kilometers

- Southwestern Willow Flycatcher Detection Sites
- Survey Area Boundaries
- - - Survey Route

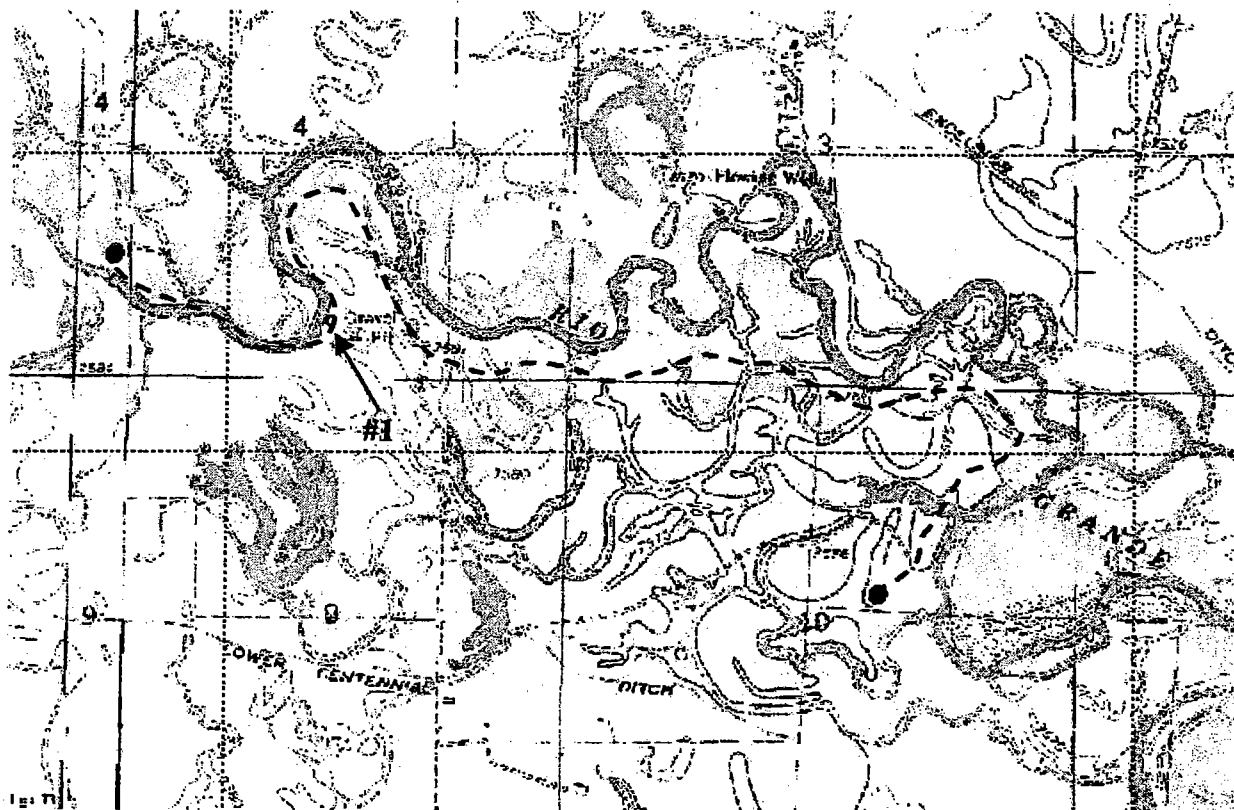


APPENDIX H, cont.

Higel State Wildlife Area

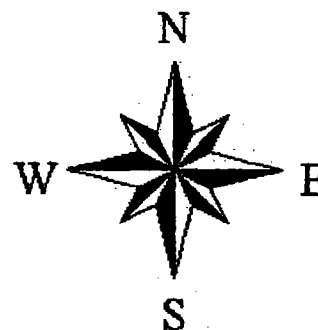
Southwestern Willow Flycatcher Survey Area, 1 July 2002

Mount Pleasant School and Home Lake USGS 7.5' Quadrangles



0 1 Kilometers

- Southwestern Willow Flycatcher Detection Sites
- Survey Area Boundaries
- Survey Route

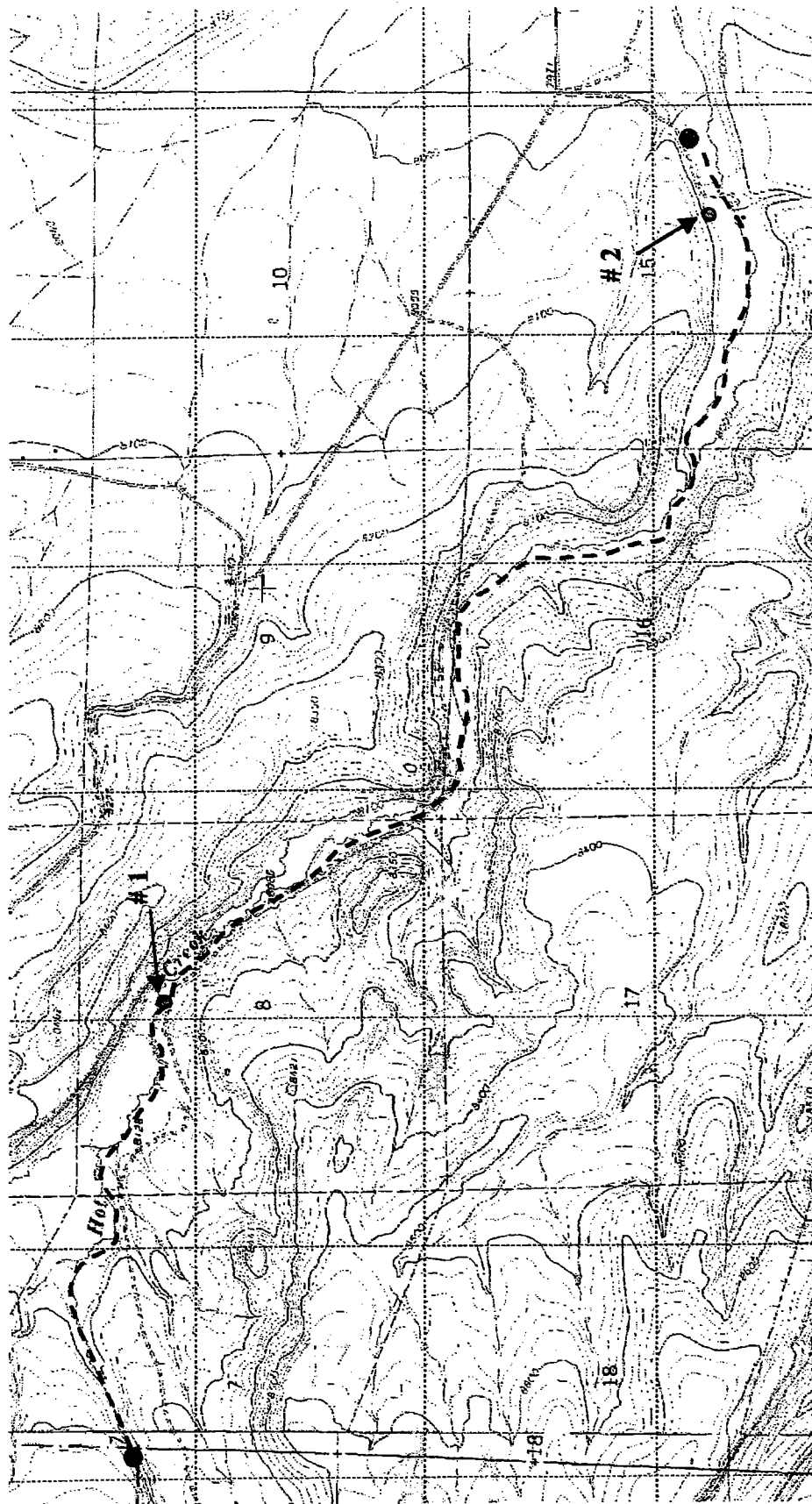




APPENDIX H, cont.

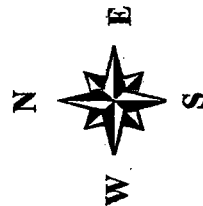
Hot Creek State Wildlife Area Southwestern Willow Flycatcher Survey Area, 28-29 May 2002

Terrace Reservoir and Centro USGS 7.5' Quadrangles



0 1 kilometers

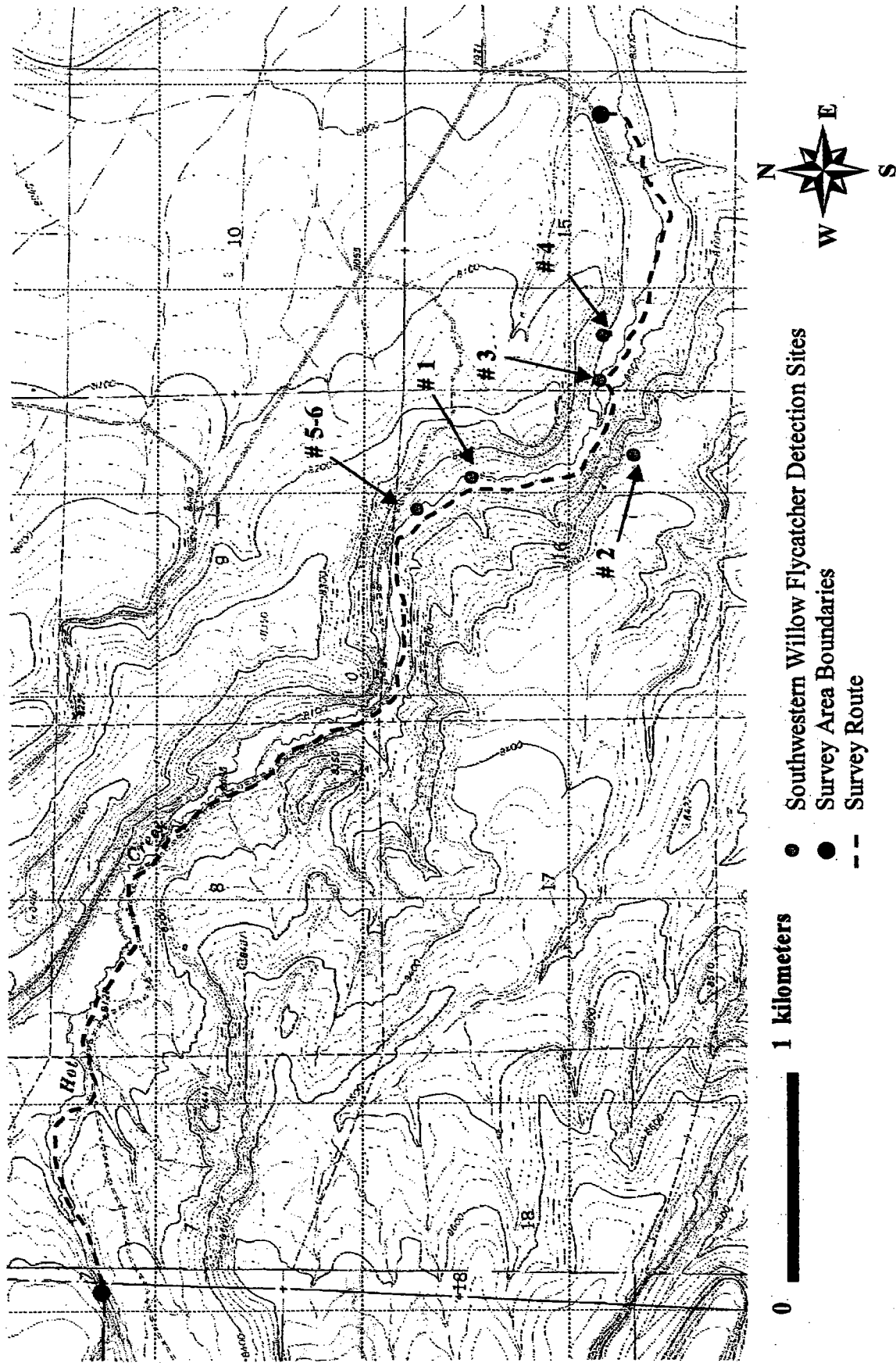
- Southwestern Willow Flycatcher Detection Sites
- Survey Area Boundaries
- Survey Route



APPENDIX H, cont.

Hot Creek State Wildlife Area Southwestern Willow Flycatcher Survey Area, 3-5 June 2002

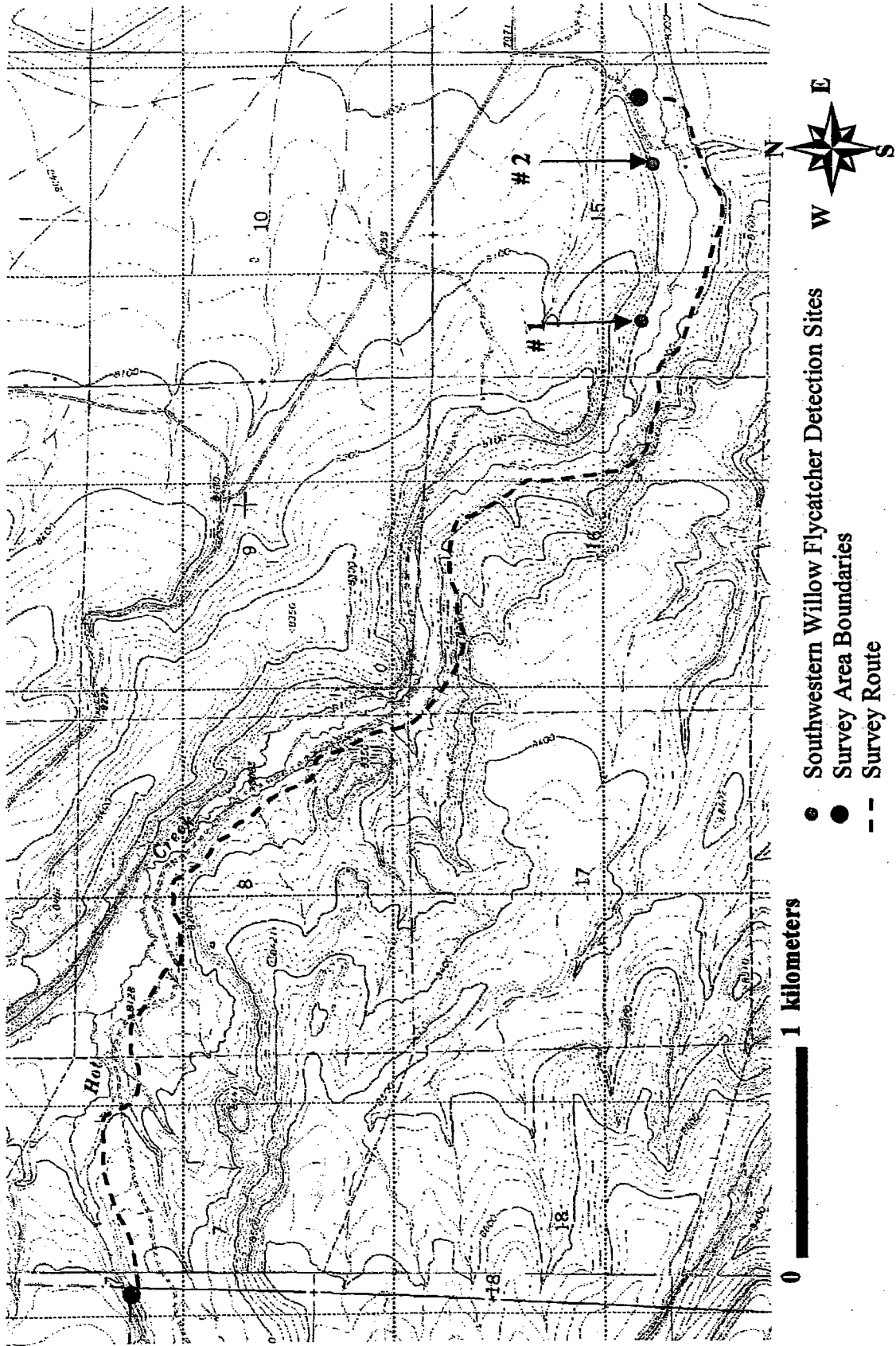
Terrace Reservoir and Centro USGS 7.5' Quadrangles



APPENDIX H, cont

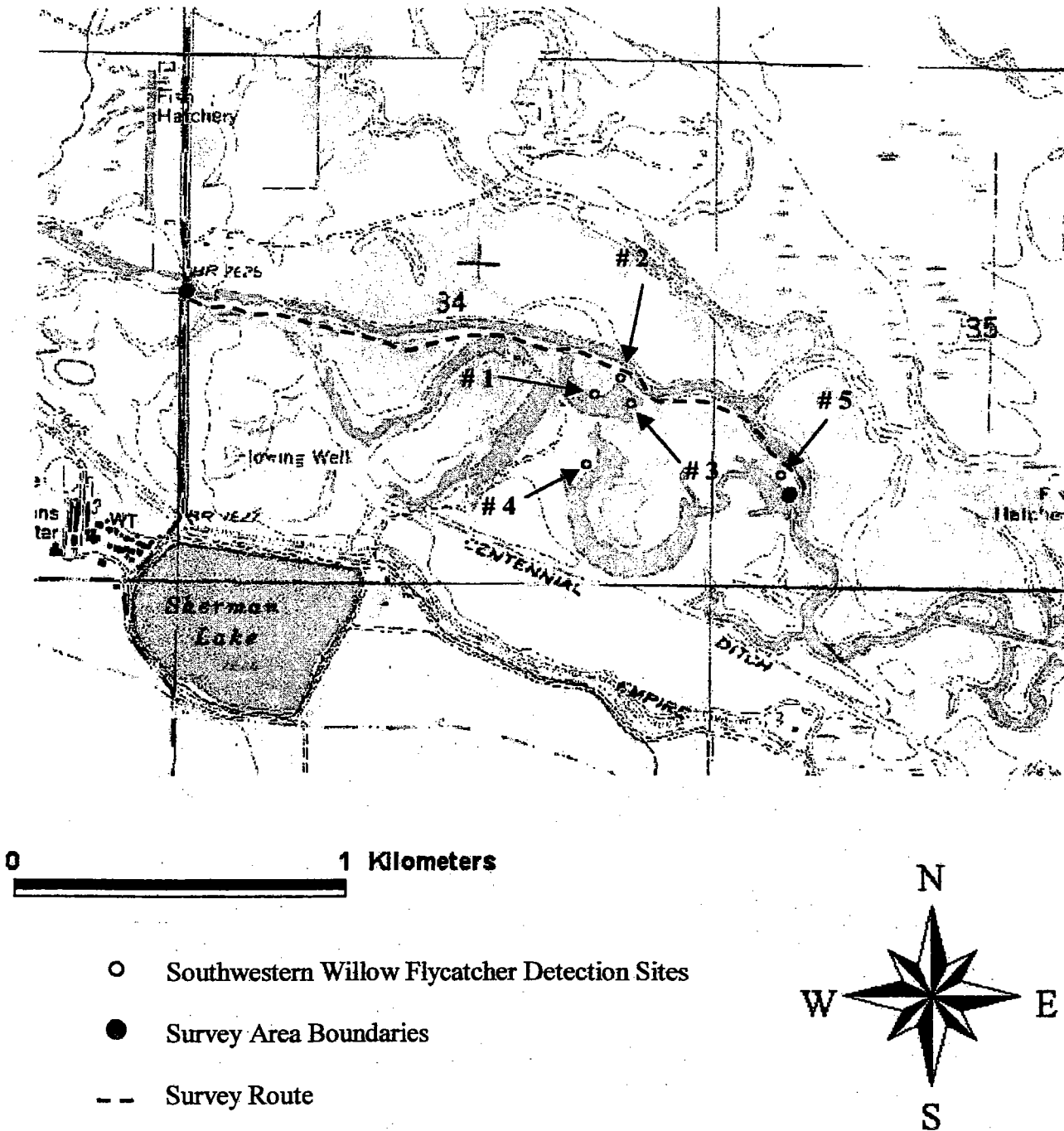
Hot Creek State Wildlife Area Southwestern Willow Flycatcher Survey Area, 25-26 June 2002

Terrace Reservoir and Centro USGS 7.5' Quadrangles



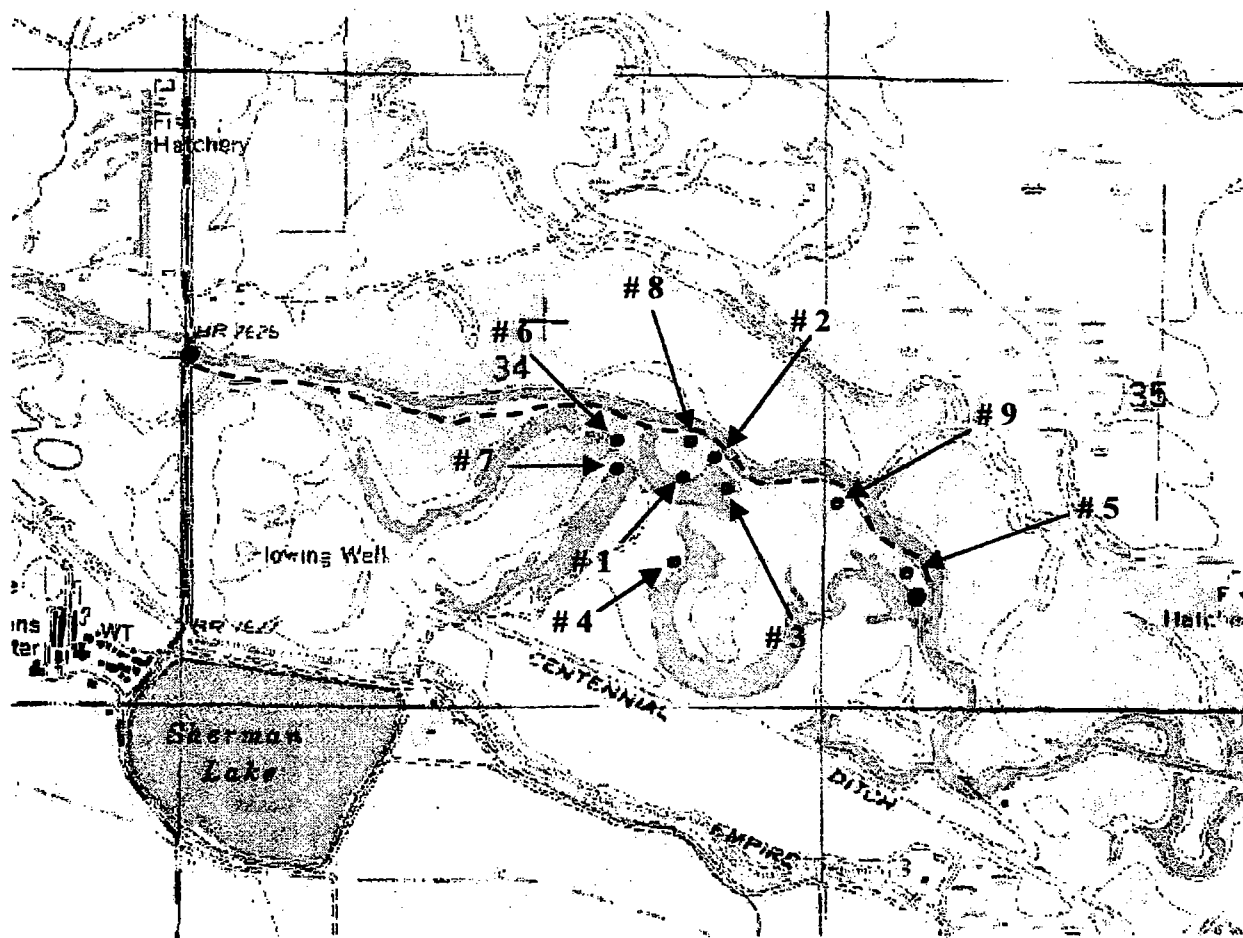
APPENDIX H, cont.

Rio Grande State Wildlife Area – Section 1  
Southwestern Willow Flycatcher Survey Area, 25 May 2002  
Homelake USGS 7.5' Quadrangle



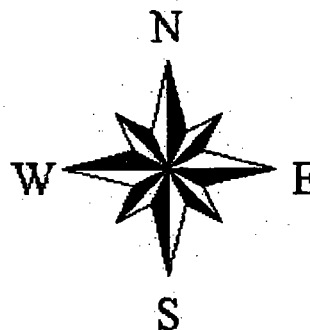
APPENDIX H, cont.

Rio Grande State Wildlife Area – Section 1  
Southwestern Willow Flycatcher Survey Area, 5 June 2002  
Homelake 7.5' USGS Quadrangle



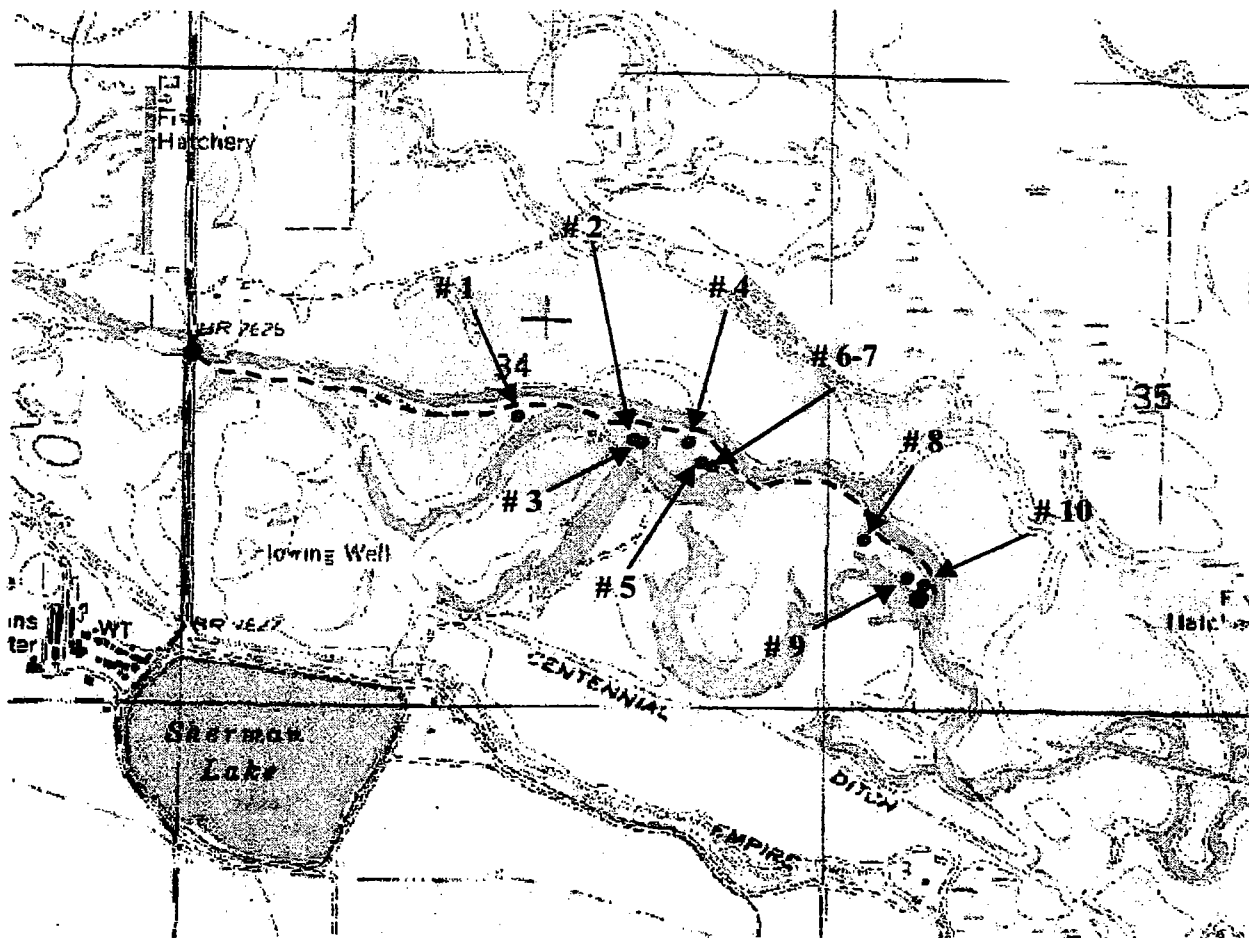
0 1 Kilometers

- Southwestern Willow Flycatcher Detection Sites
- Survey Area Boundaries
- Survey Route



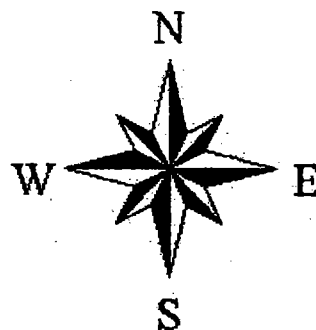
APPENDIX H, cont.

Rio Grande State Wildlife Area – Section 1  
Southwestern Willow Flycatcher Survey Area, 2 July 2002  
Homelake USGS 7.5' Quadrangle



0 1 Kilometers

- Southwestern Willow Flycatcher Detection Sites
- Survey Area Boundaries
- Survey Route

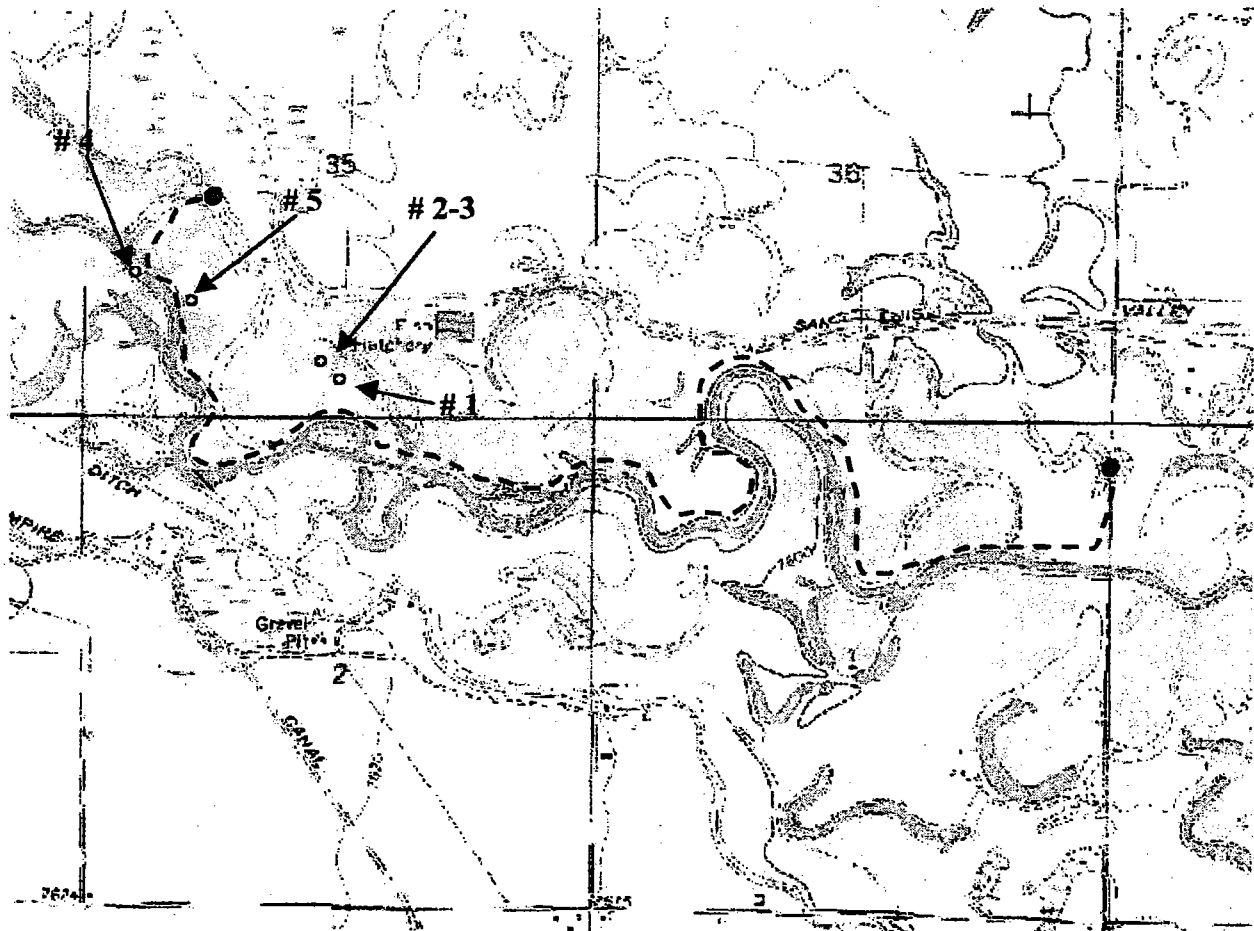


APPENDIX H, cont.

Rio Grande State Wildlife Area – Section 2

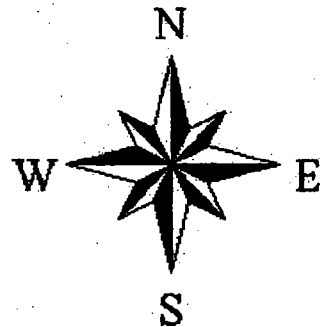
Southwestern Willow Flycatcher Survey Area, 25 and 27 May 2002

Homelake USGS 7.5' Quadrangle



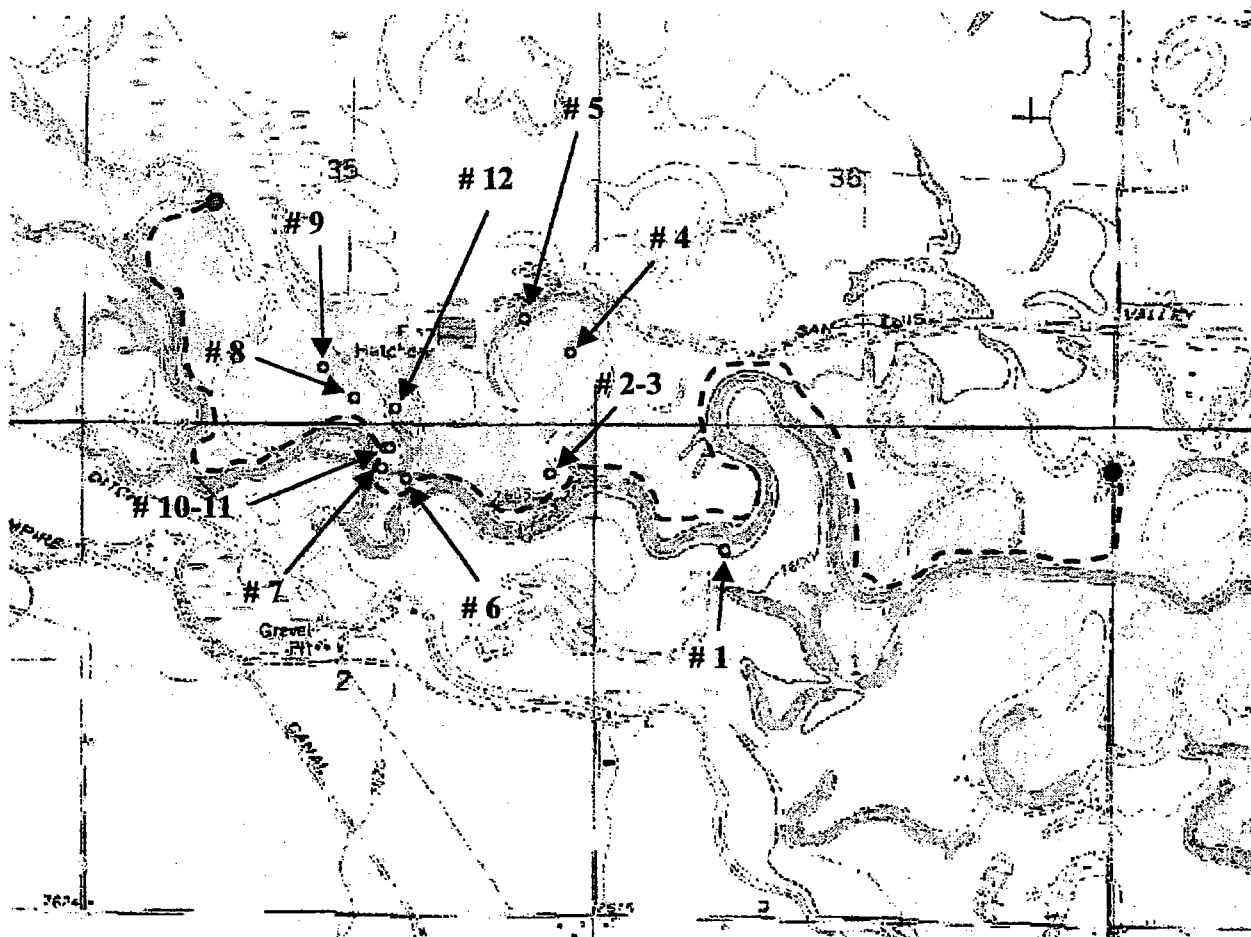
0 1 Kilometers

- Southwestern Willow Flycatcher Detection Sites
- Survey Area Boundaries
- - - Survey Route



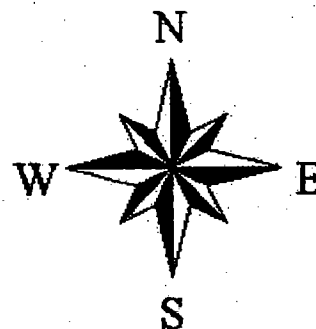
APPENDIX H, cont.

**Rio Grande State Wildlife Area – Section 2**  
**Southwestern Willow Flycatcher Survey Area, 6-7 June 2002**  
**Homelake USGS 7.5' Quadrangle**



0 1 Kilometers

- Southwestern Willow Flycatcher Detection Sites
- Survey Area Boundaries
- Survey Route



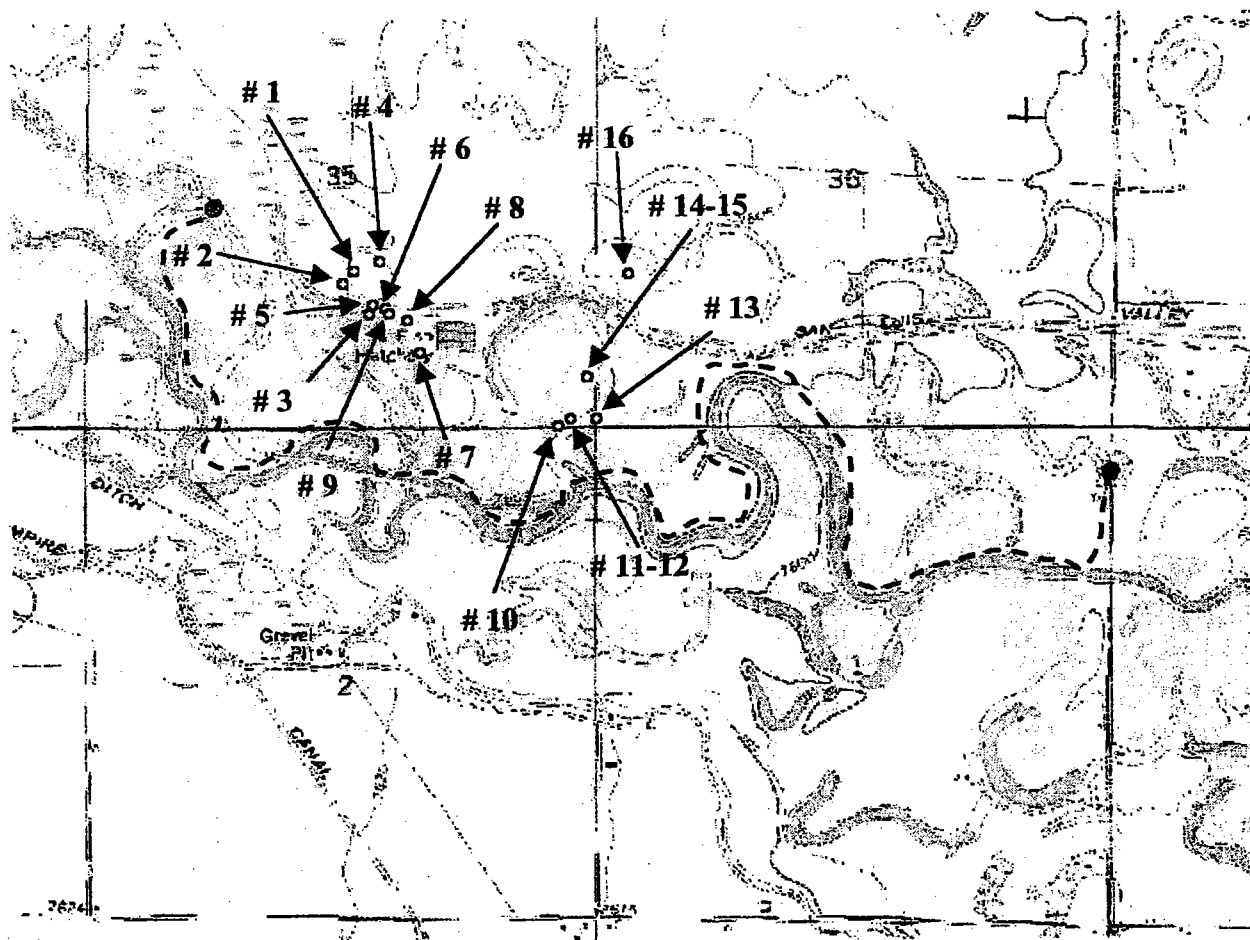


APPENDIX H, cont.

Rio Grande State Wildlife Area – Section 2

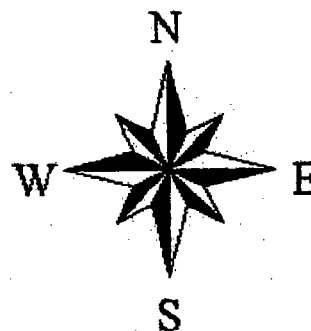
Southwestern Willow Flycatcher Survey Area, 28 June and 1-2 July 2002

Homelake USGS 7.5' Quadrangle



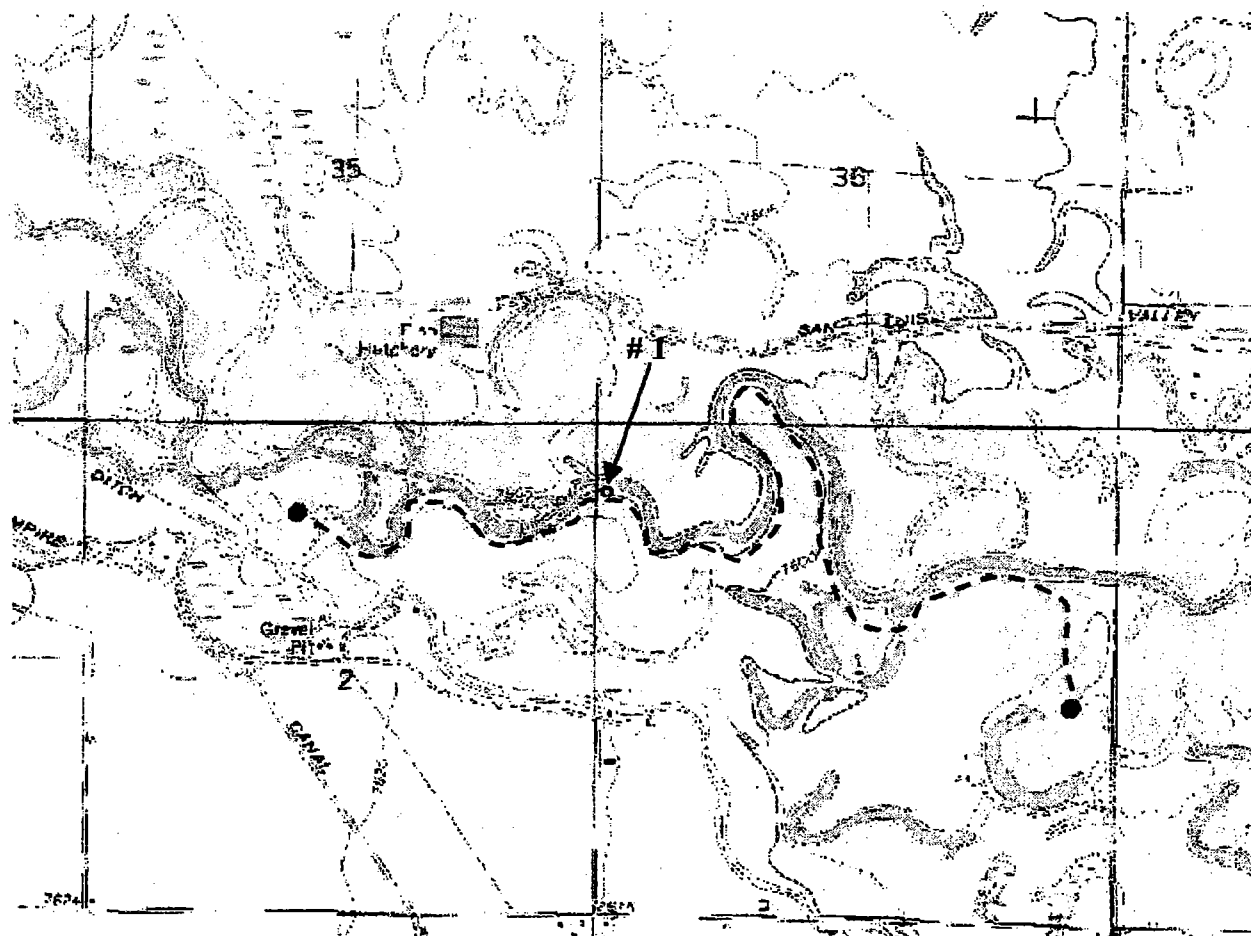
0 1 Kilometers

- Southwestern Willow Flycatcher Detection Sites
- Survey Area Boundaries
- Survey Route



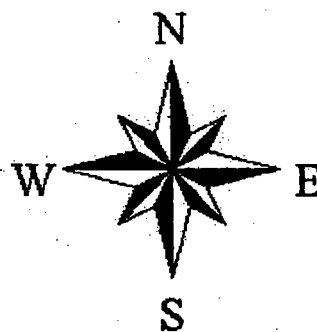
APPENDIX H, cont.

Rio Grande State Wildlife Area – Section 3  
Southwestern Willow Flycatcher Survey Area, 25 May 2002  
Homelake USGS 7.5' Quadrangle



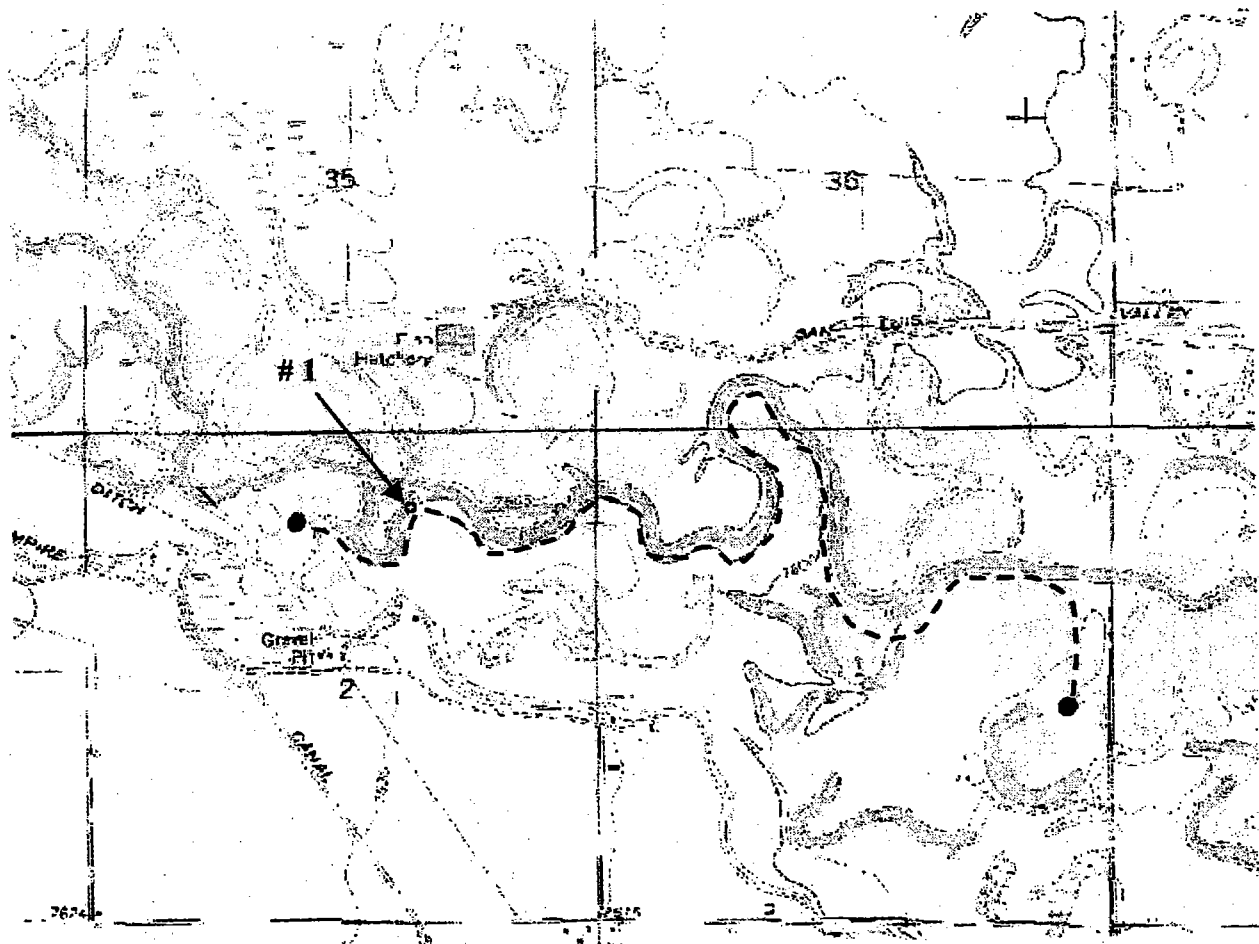
0 1 Kilometers

- Southwestern Willow Flycatcher Detection Sites
- Survey Area Boundaries
- Survey Route



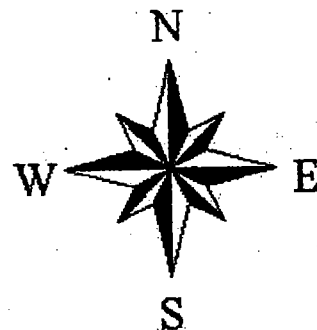
APPENDIX H, cont.

Rio Grande State Wildlife Area – Section 3  
Southwestern Willow Flycatcher Survey Area, 6 June 2002  
Homelake USGS 7.5' Quadrangle



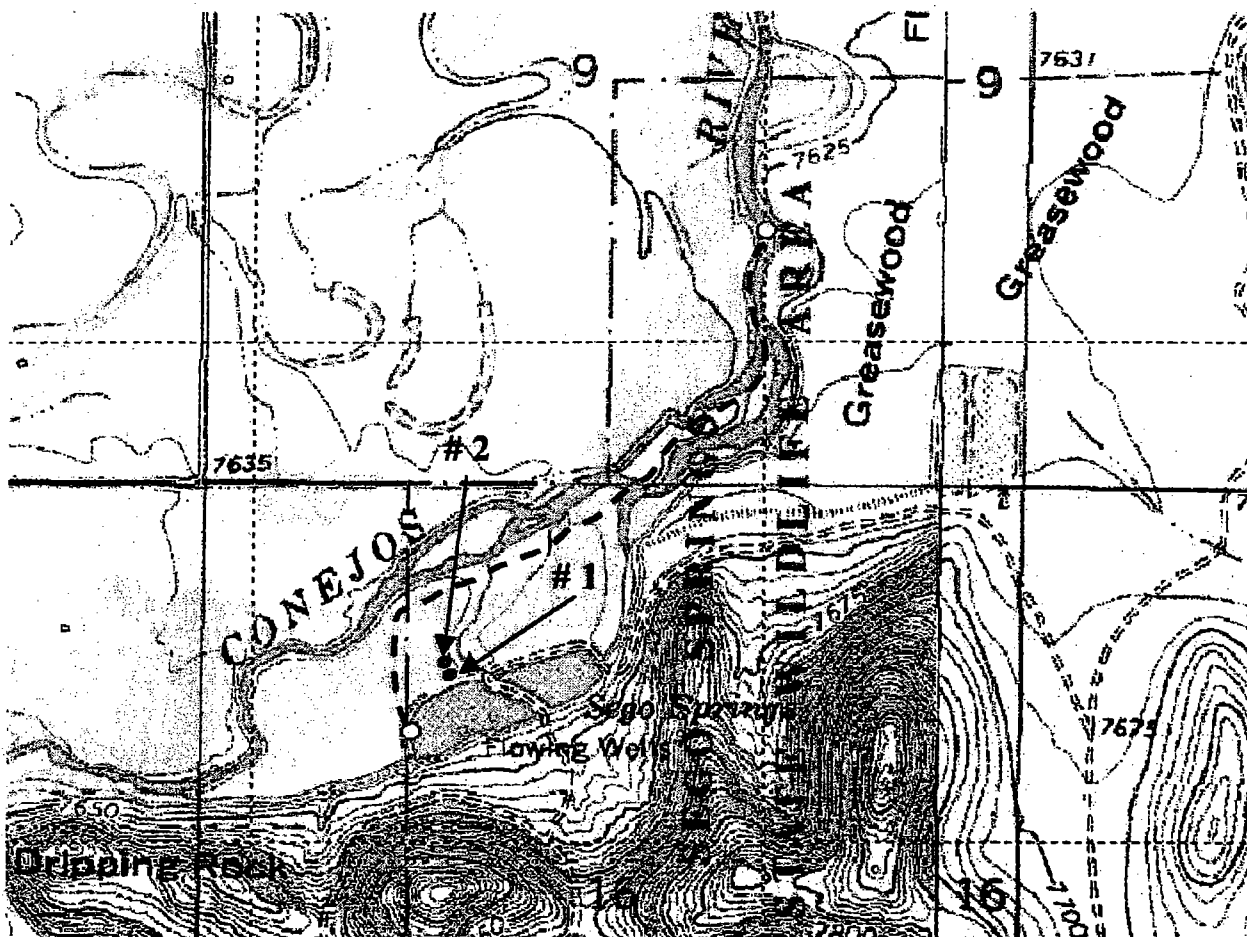
0 1 Kilometers

- Southwestern Willow Flycatcher Detection Sites
- Survey Area Boundaries
- Survey Route



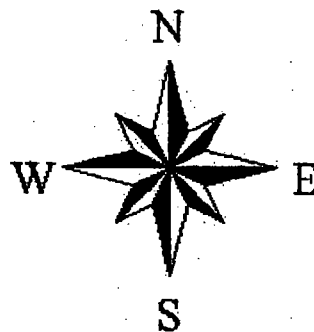
APPENDIX H, cont.

Sego Spring State Wildlife Area  
Southwestern Willow Flycatcher Survey Area, 31 May 2002  
Manassa USGS 7.5' Quadrangle

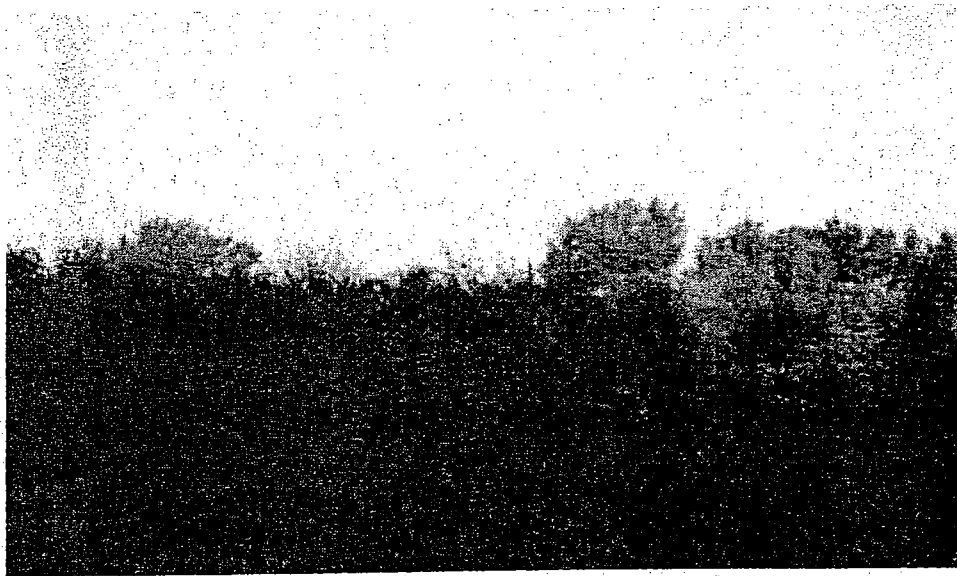


0 1 Kilometers

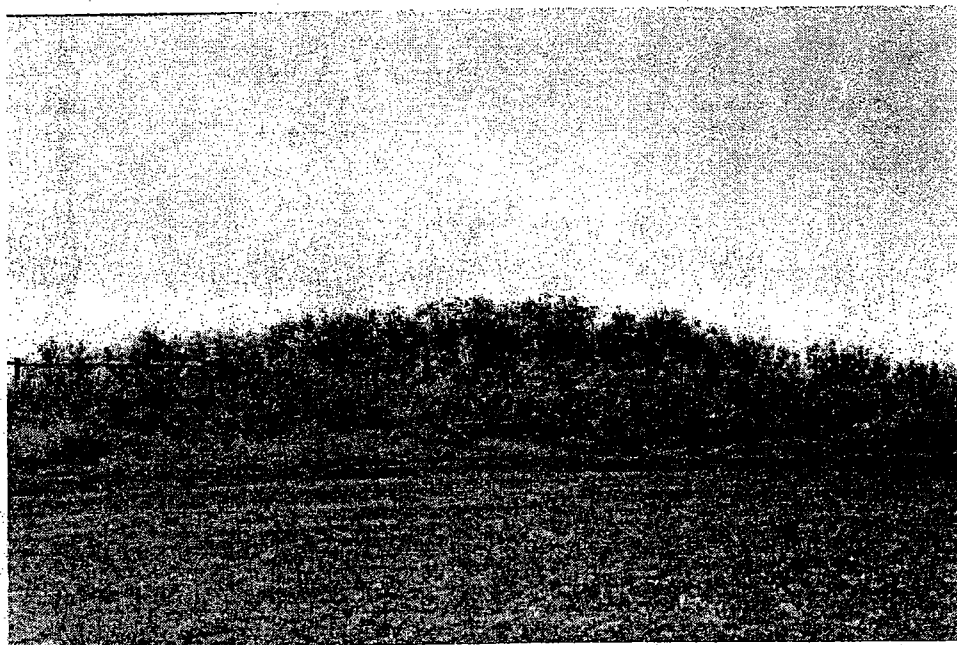
- Southwestern Willow Flycatcher Detection Sites
- Survey Area Boundaries
- Survey Route



**APPENDIX G.**



Photograph of Southwestern Willow Flycatcher habitat at Alamosa National Wildlife Refuge.



Photograph of Southwestern Willow Flycatcher habitat at Higel State Wildlife Area.

**APPENDIX G, cont.**



**Photograph of a Southwestern Willow Flycatcher location in Section 1 of Rio Grande State Wildlife Area.**

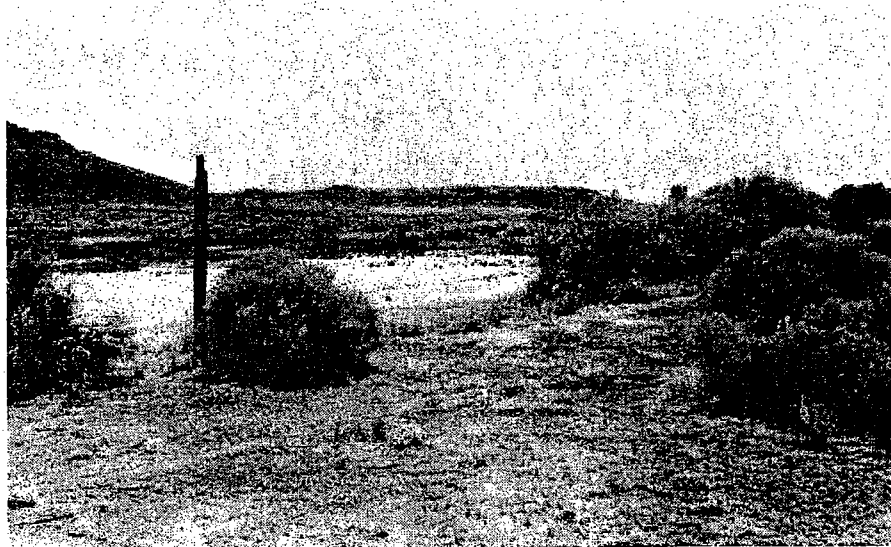


**Photograph of a Southwestern Willow Flycatcher location in Section 2 of Rio Grande State Wildlife Area.**

**APPENDIX G, cont.**



Photograph of a Southwestern Willow Flycatcher location in Section 2 of Rio Grande State Wildlife Area.



Photograph of a Southwestern Willow Flycatcher location at Sego Springs State Wildlife Area.

## APPENDIX J.

List of species observed during Southwestern Willow Flycatcher surveys in the San Luis Valley.

|                           |                                |
|---------------------------|--------------------------------|
| Pied-billed Grebe         | <i>Podilymbus podiceps</i>     |
| Double-crested Cormorant  | <i>Phalacrocorax auritus</i>   |
| American Bittern          | <i>Botaurus lentiginosus</i>   |
| Great Blue Heron          | <i>Ardea herodias</i>          |
| Snowy Egret               | <i>Egretta thula</i>           |
| Green Heron               | <i>Butorides striatus</i>      |
| Black-crowned Night-Heron | <i>Nycticorax nycticorax</i>   |
| White-faced Ibis          | <i>Plegadis chihi</i>          |
| Turkey Vulture            | <i>Cathartes aura</i>          |
| Canada Goose              | <i>Branta canadensis</i>       |
| Gadwall                   | <i>Anas strepera</i>           |
| Mallard                   | <i>Anas platyrhynchos</i>      |
| Blue-winged Teal          | <i>Anas discors</i>            |
| Cinnamon Teal             | <i>Anas cyanoptera</i>         |
| Northern Pintail          | <i>Anas acuta</i>              |
| Green-winged Teal         | <i>Anas crecca</i>             |
| Redhead                   | <i>Aythya americana</i>        |
| Common Merganser          | <i>Mergus merganser</i>        |
| Swainson's Hawk           | <i>Buteo swainsoni</i>         |
| Red-tailed Hawk           | <i>Buteo jamaicensis</i>       |
| Golden Eagle              | <i>Aquila chrysaetos</i>       |
| American Kestrel          | <i>Falco sparverius</i>        |
| Wild Turkey               | <i>Meleagris gallopavo</i>     |
| Virginia Rail             | <i>Rallus limicola</i>         |
| Sora                      | <i>Porzana carolina</i>        |
| American Coot             | <i>Fulica americana</i>        |
| Killdeer                  | <i>Charadrius vociferans</i>   |
| American Avocet           | <i>Recurvirostra americana</i> |
| Greater Yellowlegs        | <i>Tringa melanoleuca</i>      |
| Spotted Sandpiper         | <i>Actitis macularia</i>       |
| Common Snipe              | <i>Gallinago gallinago</i>     |
| Wilson's Phalarope        | <i>Phalaropus tricolor</i>     |
| Black Tern                | <i>Chlidonias niger</i>        |
| Rock Dove                 | <i>Columba livia</i>           |
| Mourning Dove             | <i>Zenaida macroura</i>        |
| Great Horned Owl          | <i>Bubo virginianus</i>        |
| Common Nighthawk          | <i>Chordeiles minor</i>        |
| White-throated Swift      | <i>Aeronautes saxatalis</i>    |
| Broad-tailed Hummingbird  | <i>Selasphorus platycercus</i> |
| Belted Kingfisher         | <i>Ceryle alcyon</i>           |
| Red-naped Sapsucker       | <i>Sphyrapicus</i>             |



**APPENDIX J, cont.**

|                               |                                   |
|-------------------------------|-----------------------------------|
| Hairy Woodpecker              | <i>Picoides villosus</i>          |
| Northern Flicker              | <i>Colaptes auratus</i>           |
| Olive-sided Flycatcher        | <i>Contopus cooperi</i>           |
| Western Wood-Pewee            | <i>Contopus sordidulus</i>        |
| Cordilleran Flycatcher        | <i>Empidonax occidentalis</i>     |
| Ash-throated Flycatcher       | <i>Myiarchus cinerascens</i>      |
| Eastern Kingbird              | <i>Tyrannus tyrannus</i>          |
| Warbling Vireo                | <i>Vireo gilvus</i>               |
| Steller's Jay                 | <i>Cyanocitta stelleri</i>        |
| Pinyon Jay                    | <i>Gymnorhinus cyanocephalus</i>  |
| Clark's Nutcracker            | <i>Nucifraga columbiana</i>       |
| Black-billed Magpie           | <i>Pica pica</i>                  |
| American Crow                 | <i>Corvus brachyrhynchos</i>      |
| Common Raven                  | <i>Corvus corax</i>               |
| Horned Lark                   | <i>Eremophila alpestris</i>       |
| Tree Swallow                  | <i>Tachycineta bicolor</i>        |
| Violet-green Swallow          | <i>Tachycineta thalassina</i>     |
| Northern Rough-winged Swallow | <i>Stelgidopteryx serripennis</i> |
| Bank Swallow                  | <i>Riparia riparia</i>            |
| Barn Swallow                  | <i>Hirundo rustica</i>            |
| Cliff Swallow                 | <i>Petrochelidon pyrrhonota</i>   |
| Black-capped Chickadee        | <i>Poecile atricapillus</i>       |
| Mountain Chickadee            | <i>Poecile gambeli</i>            |
| Bushtit                       | <i>Psaltirparus minimus</i>       |
| Red-breasted Nuthatch         | <i>Sitta canadensis</i>           |
| White-breasted Nuthatch       | <i>Sitta carolinensis</i>         |
| Rock Wren                     | <i>Salpinctes obsoletus</i>       |
| Canyon Wren                   | <i>Catherpes mexicanus</i>        |
| House Wren                    | <i>Troglodytes aedon</i>          |
| Marsh Wren                    | <i>Cistothorus palustris</i>      |
| Ruby-crowned Kinglet          | <i>Regulus calendula</i>          |
| Mountain Bluebird             | <i>Sialia currucoides</i>         |
| Townsend's Solitaire          | <i>Myadestes townsendi</i>        |
| Veery                         | <i>Catharus fuscescens</i>        |
| Hermit Thrush                 | <i>Catharus guttatus</i>          |
| American Robin                | <i>Turdus migratorius</i>         |
| Gray Catbird                  | <i>Dumetella carolinensis</i>     |
| Northern Mockingbird          | <i>Mimus polyglottos</i>          |
| European Starling             | <i>Sturnus vulgaris</i>           |
| Yellow Warbler                | <i>Dendroica petechia</i>         |
| Yellow-rumped Warbler         | <i>Dendroica coronata</i>         |
| MacGillivray's Warbler        | <i>Oporornis tolmei</i>           |
| Common Yellowthroat           | <i>Geothlypis trichas</i>         |
| Wilson's Warbler              | <i>Wilsonia pusilla</i>           |

**APPENDIX J, cont.**

|                         |                                      |
|-------------------------|--------------------------------------|
| Yellow-breasted Chat    | <i>Icteria virens</i>                |
| Western Tanager         | <i>Piranga ludovicianus</i>          |
| Green-tailed Towhee     | <i>Pipilo chlorurus</i>              |
| Spotted Towhee          | <i>Pipilo maculatus</i>              |
| Chipping Sparrow        | <i>Spizella passerina</i>            |
| Brewer's Sparrow        | <i>Spizella breweri</i>              |
| Vesper Sparrow          | <i>Pooecetes gramineus</i>           |
| Song Sparrow            | <i>Melospiza melodia</i>             |
| Lincoln's Sparrow       | <i>Melospiza lincolnii</i>           |
| White-crowned Sparrow   | <i>Zonotrichia leucophrys</i>        |
| Dark-eyed Junco         | <i>Junco hyemalis</i>                |
| Black-headed Grosbeak   | <i>Pheucticus melanocephalos</i>     |
| Blue Grosbeak           | <i>Guiraca caerulea</i>              |
| Red-winged Blackbird    | <i>Agelaius phoeniceus</i>           |
| Western Meadowlark      | <i>Sturnella neglects</i>            |
| Yellow-headed Blackbird | <i>Xanthocephalus xanthocephalus</i> |
| Brewer's Blackbird      | <i>Euphagus cyanocephalus</i>        |
| Common Grackle          | <i>Quiscalus quiscula</i>            |
| Great-tailed Grackle    | <i>Quiscalus mexicanus</i>           |
| Brown-headed Cowbird    | <i>Molothrus ater</i>                |
| Bullock's Oriole        | <i>Icterus bullockii</i>             |
| House Finch             | <i>Carpodacus mexicanus</i>          |
| Pine Siskin             | <i>Carduelis pinus</i>               |
| Lesser Goldfinch        | <i>Carduelis psaltria</i>            |
| American Goldfinch      | <i>Carduelis tristis</i>             |
| House Sparrow           | <i>Passer domesticus</i>             |